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ABSTRACT

This document outlines a plan (CODE) for the comprehensive development of the Florida State University System. Part I discusses the nature and purpose of CODE, earlier planning efforts, the Board of Regents, and the Office of the Chancellor. Part 2 presents the basic components of CODE, the objectives and educational goals, PPBS, and the planning and management information system. Part 3 discusses the System. Part 4 presents a discussion and tables of the college-age population, enrollment trends, and projected enrollments. Admissions to all levels is discussed in Part 5. Part 6 defines the needs for academic programs, and Part 7 the criteria for adding academic programs. Part 8 discusses present and projected academic programs by subject area; Part 9, interinstitutional coordination and cooperation; Part 10, continuing education; Part 11, future expansion of the System; Part 12, articulation between the System and the Division of Community Colleges; Part 13, interaction of the System with private colleges and universities; Part 14, perspectives on the financing of higher education; Part 15, 1980 projected operating needs; Part 16, space needs and capital outlay from 1968 to 1980; and Part 17, campus and physical planning. (AF)

ED0 42407

COMPREHENSIVE DEVELOPMENT PLAN
OF THE
STATE UNIVERSITY SYSTEM OF FLORIDA
1969-1980

CODE

Phase 1

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
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Office of the Florida Board of Regents
Tallahassee
December, 1969

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FOREWORD

Dramatic expansion of the number of students and the geometric progression of the cost of higher education in the last decade have resulted in a reassessment by states as to the governance of publicly supported universities. This reassessment has resulted in a rapid increase in the number of governing and coordinating bodies of higher education and in the strengthening of the powers of existing boards. One of the ultimate purposes of such boards is to plan for coordinated growth and to insure against unnecessary and wasteful proliferation of institutional programs. Failure to effect such planning and coordination will result in a university sprawl as disastrous as the creeping urban sprawl of our major cities. Furthermore, the cost of higher education is such that uncoordinated competition in the legislature by individual institutions for available state funds might well result in a large number of mediocre universities poorly serving the citizens and the body politic.

The State of Florida is singularly fortunate in having only one Board for all of its public universities. This single Board, moreover, is constituted as a governing rather than a coordinating body. It is therefore in an advantageous position not only to plan for the future but also to adopt policies which will insure the subsequent implementation of approved plans.

The projected future rate of growth for Florida makes planning for the future of higher education imperative. The past is the herald of that future. In two short decades the number of universities has grown from three to nine, the number of students from 19,015 to 60,442, and the number of tax dollars required from the state to support higher education from $13,000,000 to $118,500,000. Although the future portends continuing growth it will possibly occur at a decelerated rate.

The goal for higher education in Florida is simple to state, but it is one that requires careful management, enthusiastic support, and extraordinary wisdom to achieve. That goal is a distinguished University System which will provide maximum educational opportunities for the citizens of Florida, without unnecessary duplication or proliferation, through distinguished State Universities that have separately designated responsibilities and which will collectively offer programs in all disciplines and professions at all levels. The document which follows is an outline for the Comprehensive Development of the State University System of Florida and a glimpse at the requirements for the future necessary to attain our overall goal. The acronym for the present plan is CODE. Forecasting the future for a decade is hazardous, yet feasible if the forecast is not regarded as being cast in concrete. The unforeseeable interplay of variables which are beyond control and unpredictable must mean that any plan is to be construed as a living document that will be subject to constant modification in order to accommodate changed circumstances. Such considerations do not void the necessity for planning nor the validity of a planning document as a beacon.

These projections of CODE are based upon a number of policy assumptions which are deeply rooted in state policy. CODE does not speak to but raises a number of issues simply by virtue of pointing where we will be if we follow the policies which now guide us. Primary among such issues is the question as to continued, wide-spread, and relatively inexpensive availability of higher educational opportunities. Present policy assumes that the training given by universities is a desirable and even necessary additive to the total experience of human beings and that the percentage of the college-age population seeking college experience will continue to increase over the decade. In making such an assumption and in projecting the results based upon such assumption, CODE raises fundamental policy questions as to the validity and feasibility of continuing to provide a college education to an increasing percentage of the college-age population and to continuing to provide expanding opportunities at the graduate level. A second basic assumption is that universities will continue to perform the same role in our society as in the past. This role, except in the field of agriculture, is essentially a passive one in relation to molding society. Universities have traditionally limited their role to the training of minds and in the process have created knowledge which others have applied. The success of the universities in transforming agriculture and in operating large complexes designed to apply knowledge of the physical and biological sciences in the 40's and 50's has raised demands that universities enter the field of applied social engineering. Phase I of CODE does not address this question frontally, although some of the planning for the Florida International University and the University of North Florida visualizes more university involvement in solving the social problems of the community than has historically been the role of the universities.

Any document which rests upon the present and talks to the future is bound to speak of aspirations and additional needed tools to attain those aspirations. The consistency of detail for various parts of the whole therefore varies. CODE does not differ from other master plans in this respect. CODE does introduce at least one major novel element into existing concepts of higher education planning, however, since it contains the detail mechanics through which graduate program growth can be both assured and controlled. The unique standards set forth in Chapter VII represent the first attempt to develop quantitative criteria to insure qualitative growth at the graduate level. Although CODE does not deny to any university the right to move into graduate programs, its criteria do require that universities establish priorities, direct resources to specific programs, and assure a controlled growth based upon ascertained needs. All of this is within a broad role and scope of operations for each university.

The following Comprehensive Plan for the Development of the State University System of Florida is labeled Phase I. When discussing programs, it necessarily deals in broad general terms. Phase II, which is now underway, will consist of detailed specifications for program growth and assignment of roles to universities with respect to such programs. Phase III will consist of a detailed plan or working drawings for each university. Such a plan will constitute in large measure a restatement and rearrangement by institution of the role and scope and programs set forth in Phases I and II and will add cost factors.

CODE is a result of the interplay of many minds and the imagination and effort of many people. The contribution of the Vice Chancellor for Academic Affairs, Dr. Allan Tucker, however, deserves special notice because of his major role — especially in the development of the concept of mechanics for the control of growth at the graduate level.

Robert B. Mautz
Chancellor

I. Introduction

A. *Nature and Purpose of CODE*

In the years ahead, Florida faces the complex task of providing additional opportunities in public higher education as it continues to improve the quality of the education now offered. The Report of the Council for the Study of Higher Education in Florida (1955) marked the beginning of comprehensive planning for the state's institutions of higher learning. This effort must now be intensified if the forward thrust and impetus of the years since 1955 are to be maintained.

The present document, which is Phase I of CODE, describes in broad design the current operation of the State University System, sets forth in general terms the future goals of the System, and outlines the policies and procedures to be followed in attaining the stated goals. CODE contains an assessment of major developments in post-high school education in Florida during the past decade, an analysis of the present educational scene, and an estimate of future requirements and needs. The close interrelatedness of its basic components suggests strongly that CODE must embody the concept that planning is a continuous process which includes a great many variables that must be continually re-evaluated. In this light, moreover, CODE becomes a guide for action in higher education that links past developments with the needs of today and the goals of the future.

Upgrading the quality of today's educative process and enlarging the State University System to serve greater enrollments in the future are goals which call for both in-depth and comprehensive planning. In 1950 there were 19,015 on-campus students enrolled in degree programs in the three existing public universities; by 1960, enrollment had risen to 27,053. The State University System expanded from three to seven universities during the period 1960-1968, and in the latter year enrolled more than 60,000 students. With the addition of two new state institutions in 1972, the System will have a total projected enrollment of approximately 93,000 students, and by 1980, the enrollment will have increased to three times the 1968 enrollment, or more than 180,000. Even though the number of institutions has increased and degree programs have expanded, the quality of instruction has nevertheless steadily increased. As the population of the state continues to increase and the demand of Florida's citizens for quality education remains strong, this trend is expected to continue.

CODE is an integral part of a total effort to assure the maximum use of those public funds allocated to the State University System whose administration will be charged with the dual tasks of increasing the quality of the educative process and expanding the higher education facilities of the state. But keeping pace with expanded enrollments and insuring high quality education are only two facets of the total educational task. New programs growing out of developing systems of knowledge must be added, the unique features of present institutions must be preserved, and creative educational innovations must be tested. All projected operations, however, must be confined to those which are legitimate, essential, and educationally defensible in order to insure fiscally sound expenditures for higher education in Florida.

Efforts to plan for future higher education needs and attempts to provide for the day-to-day functions of the existing State University System are not mutually exclusive tasks, but indeed come together as parts of an integrated operation. This initial CODE document, by outlining the steps necessary to attain stated goals by 1980, must be based in part on assumptions about the nature of future occurrences and developments in Florida, in the nation, and throughout the world. As subsequent CODE documents are prepared, however, new facts and information will probably supercede the assumptions of today, and the broadly stated procedures and goals of the present document will be replaced by more finely drawn objectives and strategies.

CODE, Phase I is not offered as a detailed and fixed plan, but essentially as a framework within which future planning may occur. Not only will subsequent CODE documents be shaped by accumulated factual knowledge expressed only as assumptions when Phase I was written, but the later documents will also be given design and direction by improvements in coordination and communication that will come about as Phase I is implemented.

B. *Earlier Planning in Higher Education in Florida*

There was no state planning in higher education in Florida prior to the 1900's. During the sixty years between Florida's admission to statehood (1845) and the Buckman Act (1905), secession from the Union, Civil War, and reconstruction stifled economic growth. Although the state's capacity to provide for education at all levels was severely sapped, a number of institutions were founded in Florida offering post-high school education. Competition for state money developed among these fully autonomous institutions, and the Legislature was the final arbiter of educational policies and support.

In 1905, however, the Florida Legislature decided to abandon direct control of the state's institutions of higher learning. The Buckman Act placed the governance of the state's one university and two colleges under a Board of Control. The Buckman Act, nevertheless, clearly reaffirmed the jurisdiction of the State Board of Education as the final determining body in educational matters. (A provision of the 1885 Constitution vested control of all education in a State Board of Education, composed of the Governor, Secretary of State, Attorney General, State Treasurer, and State Superintendent of Public Instruction.) The Buckman Act, therefore, despite its obvious merits, established a dual control for higher education in Florida — a situation which impeded comprehensive planning in higher education for the next half century.

C. *The Florida Board of Regents*

In 1965, the Board of Control was renamed the Board of Regents, and its membership was expanded from seven to nine members. Legislation enacted in 1969 requires that Regents be appointed by the Governor, approved by three members of the Cabinet, and confirmed by the Senate. The Board of Regents is now, as the Board of Control was previously, the official governing board for the state universities and is under the general supervision of the State Board of Education. Prior to 1965, the members of the Board of Control were appointed to terms up to four years. Today, the nine members of the Board of Regents are appointed to nine-year terms, except in instances when appointments are made to fill unexpired terms. The longer tenures served by Board members have contributed to a greater emphasis on long-range planning than was apparent in previous years.

In a series of acts spanning several sessions, the Legislature delegated expanded responsibilities to the Board of Regents by giving it a larger voice in (a) budget preparation and approval, (b) establishment of new degree programs and their placement in the System, and (c) control of supportive educational functions and operations. In effect, the 1963, 1965, and 1967 Legislatures largely removed the legal complexities of dual control creating a climate for comprehensive planning on a system-wide basis.

D. *The Office of the Chancellor*

The Chancellorship — a position created in 1965 by stattute — has increased the Board's capability to undertake long-range planning. Since 1954, the role of the Board's executive officer has been restructured on three occasions. The original position of secretary to the Board, created along with the Board of Control in 1905, persisted until 1954, when the secretary became the executive secretary. Three years later, in 1957, the title of the position was changed to executive director. Finally, in 1965, a Chancellor was appointed. The Board, for the first time, had a chief educational officer in whom could be vested the required broad administrative responsibility to intensify the necessary long-range planning which had its early beginnings in 1955 in the work of the Council for the Study of Higher Education in Florida.

The progression of both the governing board and the Chancellorship into their present domains of decision-making and administrative control has brought about conditions for long-range, comprehensive planning that are more favorable today than ever before.

The Chancellor, with his leadership role defined and undergirded, has established procedures for inter-institutional coordination and cooperation, and has thereby merged the resources of the universities with those of his staff in order to undertake long-range planning. Recent examples of such planning activities by the Chancellor's staff have been the planning documents for the new Miami and Jacksonville institutions to be operative in 1972. These documents,[1] which set forth projected programs, initial costs of operation, and building requirements, were prepared and developed internally by the office of the Chancellor without recourse to outside consultants. In the past, the Board of Regents has relied on the assistance and guidance of paid consultants, a need now considerably reduced by the development of professional capabilities on the Chancellor's staff working closely with the personnel of the existing universities.

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[1] *Planning for a New State Institution of Higher Learning in Dade County, Florida.* Tallahassee: Florida Board of Regents, October 1968; and *A New State University in Jacksonville, Florida,* Tallahassee: Florida Board of Regents, May 1969.

In the same way that the planning for the Miami and Jacksonville institutions was effected within the broad educational design provided by the Council for the Study of Higher Education in Florida, planning for future programs, centers, branches, and institutions will occur within the framework of CODE. Reviewing the developments in higher education in Florida over the past 150 years, one may observe that educational needs emerge in quick succession, and that without comprehensive planning, the higher educational venture is indeed hazardous. By developing and implementing CODE, the Board of Regents may now redouble its efforts to carry forward a program of long-range planning that not only assigns an educational purpose to each of the universities, but in some measure also provides for assessing the degree to which stated goals are fulfilled.

II. Basic Components of CODE

CODE is a goal-oriented document. The comprehensive planning which has occurred up to the present time, and which will take place subsequently as CODE becomes operative to a greater degree, must first be given direction by broadly stated educational goals or objectives. But besides these educational goals, there is also a need to discuss two administrative strategies or systems of implementation: one for determining program financial requirements and priorities as they relate to the contributions of programs toward goal attainment, and the other for developing the informational tools essential for decision making. Both strategies have been adopted to insure maximum progress toward the established goals of the State University System.

A. *Objectives — Educational Goals*

1. Florida's primary goal is to build an unexcelled State University System of higher education consisting of distinguished state universities which will collectively provide the citizens of Florida with educational opportunities in all disciplines and at all degree levels without unnecessary or wasteful duplication or proliferation. All state universities will have baccalaureate teacher education and business administration. Specialized and professional programs will also be developed in designated universities through the baccalaureate, master's, doctorate, and post-doctorate levels. Programs in specialized disciplines, however, will be established only at those institutions where such programs are a logical adjunct to existing operations and where need exists as determined by qualitative and quantitative criteria. To insure that each of the offerings in the State University System is excellent and that the universities collectively provide educational opportunities in a broad range of disciplines, each university must have

strength in areas peculiar to it. But no institution will be able to offer programs in all disciplines at all levels.

2. Florida must provide for the growth of enrollment in its public colleges and universities through 1980. To accommodate this growth the state must plan to enlarge its seven existing institutions and to bring into operation the Miami and Jacksonville institutions already authorized. As this expansion takes place, however, there is some risk that a dilution in the educative process may occur which would lead to colleges and universities of poor quality. Not only must such a drift toward mediocrity be avoided, but the quality of the present educative process must also be improved. Otherwise, Florida's resources available for higher education will be expended unwisely and inefficiently.

3. New programs developing from more complex systems of knowledge will be added to the curricula of Florida's public universities. Although programs of study in the arts and sciences, business administration, and teacher education constitute the core of a systemwide academic program and will be offered in all of the public universities, more specialized curricula will only be added to the instructional programs of those institutions best suited by location, related on-going programs, and available faculty. Expansion of the systemwide academic program will thus occur without unnecessary duplication of specialized programs of study in the universities. Necessary duplication of offerings will occur only when the efficient utilization of state funds is not impaired.

4. The concept of unique institutions of higher learning within the State University System is recognized and will be honored as the system is expanded. Through the process of periodic self-study and evaluation, the various universities will refine their educational purpose, formulate plans for better fulfilling their role and scope as set forth in this document, and initiate review and appraisal of new goals and objectives.

5. Continuing education programs of high quality will be provided throughout the state where there are demonstrated and justified needs. Continuous studies will be conducted, moreover, both by the universities and on a systemwide level in order to identify the need for new off-campus offerings, and to establish new centers. Continuing education programs must be seen as basic components of the universities' instructional program, and the universities must strive to offer off-campus instruction that is consistent in quality with campus instruction.

6. Special efforts will be made to provide for the smooth

and equitable articulation between the junior colleges in every region of the state and the State University System in matters of curriculum, academic program development, and student transfers.

7. Liaison and cooperative planning in matters of curricula, data exchange, articulation of students, and facilities will be maintained with the secondary schools, the community colleges, and with the private sector of higher education in Florida.

B. Planning-Programming-Budgeting System

Although the range of programs in which a modern university can effectively become involved appears to have no definite boundaries, the funds and human resources which are available for higher education are limited. As a result, universities are constantly in the position of trying to serve societal needs within the constraints and realities of available support. A logical solution to this educational dilemma appears to involve establishing program priorities that are based upon definable needs, upon financial requirements, and upon the relevance of the program to the overall objectives of the university. A major factor to be considered in establishing program priorities should be the effect on fund availability and the measurable return on the investment.

Relating program objectives to the cost and the benefits received is fast becoming an accepted method of priority analysis in higher education. When set forth in an operational design, this approach is commonly known as a Planning-Programming-Budgeting System (PPBS). Such a system might offer the best means yet devised to aid educational administrators in relating cost-benefit factors to academic programs. The use of PPBS might accomplish two essential tasks: (l) It could give visibility to the objectives of the university and could allow consideration of alternate means of reaching these objectives. (2) It could aid in the analysis of the relationships of potential costs to quantifiable educational benefits for current and future years. This analytical tool, properly used, could have significant impact on educational decision-making.

In summary, the PPBS approach is characterized by:

a. A focus on objectives, regardless of organizational structure.

b. Consideration of all costs, both present and future, to the extent they can be determined. This would include both capital and operating costs.

c. A systematic analysis of alternatives, the cost implications of each alternative, the estimated results of each alternative, and a presentation of the resultant cost and benefit tradeoffs for each alternative along with an exploration of assumptions used.

d. After-the-fact evaluation of the relative attainment of objectives for future use in selection of alternatives and priorities.

PPBS will not make educational decisions, but it might provide deeper insight into the immediate benefits and long-range cost implications of university programs. The State University System of Florida, along with the other agencies of state government, is developing a Planning-Programming-Budgeting System which will consist of a six-year financial plan based on specific program objectives. Such a six-year plan for developing educational objectives might provide an overall framework within which personnel and facilities needs could be predicted. It might thus establish a more consistent basis for preparing the annual budget for the State University System. The annual budget-making process could, in turn, feed back into the six-year plan and would result in its annual revision and extension. In this way, PPBS could be a continuously updated projection of quantifiable educational objectives and their requisite support for at least six years into the future.

C. *Planning and Management Information System*

Many modern management techniques and procedures now being developed in both the private and public sectors of the economy are appropriate to the future planning and management of the expanding State University System of Florida. The Planning-Programming-Budgeting-System just described in the preceding section will utilize several analytical tools such as cost effectiveness analysis, cost benefit analysis and the broader concept of systems analysis. The use of these analytical procedures together with operations analysis, simulation modeling, and operations research are all highly dependent on the availability of historical, current, and environmental data and information. To meet these information needs effectively, therefore, the Chancellor's office is developing a Planning and Management Information System.

Although the Planning and Management Information System will, to the extent possible, utilize existing data from the normal operating systems of each university, any future changes in university operating systems will be centrally coordinated in order to promote standardization and compatibility — a procedure that will thereby allow for the expansion of the Planning and Management Information System. One major objective in establishing the central Management Information System will be to develop university information systems which will be responsive to the demands of day-to-day management.

The primary use of the Planning and Management Information System will be the development of short- and long-range resource planning. The current trend in higher education toward "lump sum" budgeting (the allocation of funds to the Board of Regents rather than to individual universities) emphasizes the Legislature's recognition that the University System itself can best determine the most efficient and economical allocation of available resources within broad policy determined by the Legislature. This allocation must be accomplished by wedding long-range planning with an annual budget cycle. The crucial relationship between such long-range planning and the constraints of the realities of an annual budget must be clearly recognized. Otherwise, planning becomes a mere academic exercise. The Planning and Management Information System must therefore be capable of projecting future resource demands based not only upon the planning included in CODE, but also, ultimately as this planning relates to the availability of funds on an annual basis. An Academic Resource Allocation Model (ARAM) will be developed which will consider historical data, national and regional environmental data and projected planning and policy decisions.

ARAM will be used as an analytical tool to test the economic feasibility of long-range plans and to consider the impact of alternative methods of meeting stated objectives. It will also be capable of considering priority decisions made during the annual budget process and suggesting alternatives for the allocation of resources. Nevertheless, information, data, models, and analysis will not replace decision-making, nor, indeed, even reduce the number of decisions which must be made in the planning and management of the State University System. But the proper use of the above elements may increase the decision-maker's knowledge and provide him, moreover, with a quick analysis of the probable effect of alternative decisions.

III. The State University System of Florida

A. *Institutions*

By 1972 the State University System of Florida will consist of nine universities, seven of which have already been established. Three of these — the University of Florida at Gainesville, Florida State University at Tallahassee, and Florida Agricultural and Mechanical University at Tallahassee — were in existence prior to 1960. Four institutions were established between 1960 and 1970 — the University of South Florida at Tampa, Florida Atlantic University at Boca Raton, the University of West Florida at Pensacola, and Florida Technological University at Orlando. Two additional universities are scheduled to open in 1972, one in Miami and the other in Jacksonville. Of the seven existing institutions, five offer instruction beginning at the freshman year and extending through graduate studies. Two, namely Florida Atlantic University and the University of West Florida, are upper division universities which offer instruction that begins at the junior year and extends through graduate study. The two new state institutions which are planned for Miami and Jacksonville will also be upper division universities.

B. *The Concept of the Upper Division University*

When the Division of Community Colleges was established in 1957, junior college graduates were expected to be major input factors for the state universities at the junior level. The logical kind of university to add to an expanding system, therefore, seemed to be the upper division institution without freshman and sophomore classes. Instead of increasing the number of traditionally conceived four-year universities, whose first two years would in a large measure be a duplication of lower division programs, the State University System decided to add upper division institutions in order to utilize more effectively the output of Florida's extensive community college structure. The implication of this decision proved to be a wise accommodation to the future development of public education in the state. By 1968, the network of community colleges had grown to 27 institutions, enrolling approximately 90,000 students. In the school year 1967-68 alone, an estimated 12,600 students completed the two-year program of the community colleges, and approximately 6,000 of these community college graduates entered public universities the following fall.

The upper division universities in Florida are attempting to build special programs in partnership with junior colleges in order to provide junior college graduates the opportunity to complete the baccalaureate degree. In addition, three-year curricula leading to a master's degree have been planned for qualified junior college graduates who express an early commitment to graduate study in a specific discipline. The bachelor's degree is obtained at the end of the first two years of this three-year program. Although the upper division universities are relatively young, it is possible at this time to make some preliminary comparisons between various aspects of upper division universities and traditional institutions.

Initial studies at upper division universities in the state show that their enrollment patterns differ significantly from those at the established, traditional state universities in Florida. The proportion of junior and senior students in the upper division universities who enroll in the arts and sciences is less than the proportion of junior and senior students who enroll in arts and sciences at the traditional universities. In other words, junior college graduates are more likely to enroll in such professional programs as education and business administration than are students who have completed the lower division at a traditional university.

The implications of these preliminary studies are important for the future initial planning of upper division institutions in the System which rely so heavily upon enrollments from the junior colleges. Initial staffing and the incorporation of administrative units must be geared to projected patterns of enrollment to insure that future academic development is closely related to need. Upper division universities, it seems clear, are different from traditional institutions in more ways than one, and their differences must be taken into account in any future planning in the state system. Effective development will depend upon the examination of all identifiable variables. Continuing studies of enrollment patterns will produce data to support the special characteristics of the upper division university and its special relationship to the community college.

C. *Individual Roles of the Several Universities*

Each of the nine public universities is basically a general purpose institution of higher learning. In fulfilling such a general purpose role, an institution offers baccalaureate and selected graduate degrees in the arts and sciences, in business administration, and in education. Not only do the public universities of Florida have a general purpose role which gives them a commonality in their program offerings, but they also have specific purposes and roles that contribute to their uniqueness as institutions of higher education. Moreover, each university will engage in research and extension activities consistent with its assigned role. Although the complete role of an institution has a stability that tends to persist over a period of years, its peculiar role may change as the state's educational needs change. Described here are the various overall institutional purposes as they have been developed up to the present, without a discussion of any specific curricula. This general configuration of institutional orientations is likely to remain stable through 1980, and specific programs are expected to develop within each individual institutional framework. Each academic department within a given institution should direct its focus of attention to the general framework of goals for that university in its assigned role within the University System.

Two of the long established universities, the University of Florida at Gainesville and Florida State University at Tallahassee, have similar educational goals. They offer diverse undergraduate, graduate, and professional programs of study and conduct extensive research. Their primary roles in the State University System, therefore, will be to serve as centers for advanced graduate and professional studies. For the most part, students selecting either of these universities for undergraduate study will be preparing themselves for admission to graduate professional study and advanced graduate study.

The University of South Florida at Tampa is a general purpose university which will place increasing emphasis upon advanced graduate and professional studies during the next ten years. Because it serves a densely populated metropolitan community, the research efforts of many of its departments will be oriented toward the solution of problems peculiar to the modern urban environment.

Florida Agricultural and Mechanical University has since its inception been conceived primarily as Florida's general purpose institution of higher learning to serve the state's Negro population. It has had a long and distinguished history as a major regional, national, and international educational center for black people. As the social climate has changed and evolved in this nation, however, the role of FAMU has been altered in many ways; now, building on its already established academic strengths, and not limited to black students, it can serve a significantly important educational role. Because Florida ascribes to the new social developments, it also recognizes the important contribution which Florida A & M University has to make to the educational development of a large segment of the state's population which has been long deprived of economic and educational opportunities. Florida A & M University is first of all a general purpose institution. Its special role, however, will be to train students to achieve leadership in minority communities, to become public school teachers, and to assume professional roles — skilled in the methods and knowledge necessary to improve conditions and find solutions for the problems of members of a community who have long suffered educational and economic deprivation. At the same time, FAMU may act as a catalyst in relating these individuals to the total community.

To accomplish this goal, FAMU will take students who have graduated from accredited high schools and who in the opinion of its admissions committee will profit from an educational experience there. Such students will be able to complete the lower division program of the university in two years or more. Students who require additional attention and intensive tutoring or counseling will be given it. Admission to the upper division programs of Florida A & M University, however, will depend upon the same admission standards as any state university, and the students in the upper division will be expected to achieve academically the same standards as are expected at all the universities in the State University System.

The nature of the lower division academic environment which Florida A & M University students are afforded provides research opportunities for FAMU faculty members to assess characteristics, aspirations, and innate educational capabilities of students whose origins have stemmed from communities long deprived of adequate economic and educational opportunity.

Opportunities are also provided for experimentation, testing, and implementation of new instructional techniques for these students. As one of its objectives, each department in the university, regardless of its academic discipline, should relate the work of that academic discipline to the special role of the university. Faculty members from all disciplines, from within the institution itself, and from the State University System will have occasion to observe and study in microcosm the vast social complexity that must be resolved in our rapidly expanding society.

Florida Atlantic University is a general purpose university established to serve the students in its region. Its unique role in the University System, however, is to experiment with new and innovative instructional media and technology. One of its objectives is to develop ways and means of putting at the disposal of students all of the new materials and aids to learning that will enable them to achieve maximal results with minimal requirements of faculty direction and supervision. The facilities of the university will be available to all faculty in the system who wish to experiment with new media and technologies in the teaching of their respective disciplines. The university's research facilities will be used to develop new instructional media and techniques and to train students who are preparing to become teachers in the use of the latest available instructional equipment. Florida Atlantic University, more than any other institution, will provide to the other universities in the System the results of such research. This university will thus emphasize innovative academic experimentation with instructional technology for the benefit of the entire System.

The University of West Florida is a general purpose university meant to serve the state's population in the western portion of the panhandle of Florida. It is unique in the University System in that it follows an administrative organization intended to improve learning by bringing faculty and students into a new kind of residential, collegial relationship. Instead of an administrative organization of its faculties in the traditional pattern by colleges according to disciplines, the framework of the university includes the concept of small colleges — each of not more than 2,000 students — and each containing faculty from an essentially unrelated number of disciplines. In essence, the University of West Florida is an attempt to combine the attractive features of a large university situation with the virtues of a liberal arts college environment. The collegial atmosphere is meant to be conducive to the development of a "community of scholars." Colleges will be added as enrollments increase beyond the maximum 2,000 for each of the three existing colleges. Students at the University of West Florida are thus able both to identify themselves with a small college and to develop personal relationships with fellow students and faculty closer than might be possible within the traditional administrative organization of large universities.

Florida Technological University in Orlando is a general purpose university established to serve the region in which it is located. Its uniqueness, however, will be in emphasizing the development of teaching and research programs in various technologies and applied arts and sciences. Achieving this role will be the responsibility of departments concerned not only with technological disciplines, *per se*, but of all departments. Faculties of such subject matter areas as education, business administration, and social and behavioral sciences will develop curricula to train individuals whose career objectives are to work with people engaged in technological professions and occupations. The general education program of the university will emphasize the social, political, and economic implications of technological development in modern society. Thus, the emphasis of Florida Technological University will include experimentation with new ways of perceiving academic concerns from a technological point of view. The natural development of the university will proceed to relate the traditional academic endeavors to the demands of Florida's space and technological community.

Florida International University, to open in Miami in 1972, will serve primarily as a general purpose university for the southeastern region of the state. By 1980, the university should have almost 20,000 students with the opportunity to orient its programs to the solution of some of the most pressing problems of our age, namely those concerned with the urban settlements into which man has gravitated. Thus, the new university will focus its programs in economics, political science, management, sociology, education, transportation, and physical planning — indeed, the spectrum of disciplines — upon the laboratory consisting of the community in which it is located. Moreover, in contrast with other long established urban centers, the major growth of metropolitan Miami lies immediately ahead. Projections are that its population will double within the next twenty years. Thus the new university will be presented with the unique opportunity to help shape the future city as well as study its current urban environment. The new institution must address itself to the ills of the surrounding major metropolitan area and become involved in helping to solve problems of the community of which it is a part. The university must commit itself to the strengthening of its departments concerned with urban studies and to the shaping of these disciplines in a way which will provide a focus of interest around urban affairs. The concept of urban planning involves the synthesis of many disciplines as applied to a central problem of our time.

A second opportunity lies open to the university. It is located at the nearest geographical point of mainland United States to an area which will become of growing importance to this country. Beginning with the Monroe Doctrine and on through the Alliance for Progress, the United States has recognized that its welfare is interwoven with the welfare of its neighboring countries to the south and the north. As the university orients its programs to a solution of urban problems which surround it, so it can be a connecting link between the culture, economics, and political systems of the Americas. The City of Miami has a large Spanish-speaking population, and is considered to be a principal gateway between North and South America. The Board of Regents and the State University System of Florida have traditionally sought to develop closer relations with Latin and South America and to strengthen the academic ties between the Americas. The new state institution will develop programs of inter-American studies which will complement those offered by other institutions in the area.

The University of North Florida in Jacksonville to open in 1972 will be a general purpose university, "urban" in character and meant to serve primarily the northeastern region of the state, with facilities and curricula that will seize the spirit of its metropolitan environment. The newly expanded City of Jacksonville is the commercial and financial hub of a major geographical area that is not only growing in numbers of citizens and varieties of economic activity but is also the major port of entry for the South Atlantic region. As a warehousing point, Jacksonville is at the hub of a radius that reaches a market of millions. The growing capability of the city's port and transportation facilities insures that the city will continue to be a major focus for the nation's distribution network. In addition to the distribution centers and industries, the insurance and banking industries in Jacksonville make it one of the economic matrices of the Southeast. Finally, the unprecedented experiment in city-county consolidated government recently undertaken by the urban community of Jacksonville will serve as a living laboratory for future studies of innovative governmental and organizational functions.

Taken together with the broadly based and rapidly growing economy of this developing major urban center, the environment out of which the new university will develop is both vigorous and intellectually provocative. Its curriculum will adapt to the challenge of its environment by providing programs oriented to the particular needs and opportunities which the City of Jacksonville affords. In the areas of commerce, trade, and transportation by land, ocean, inland waterways, air, highway, and rail, Jacksonville has such unusual activity that it will provide for uncommon research and consulting opportunities. Since the insurance industry has selected Jacksonville as one of its major centers, the University will be particularly responsive to the needs of this economic sector. With the commercial banking and investment satellites that surround such a concentration of insurance concerns, the university will be provided with extensive opportunities for service, training, and research. The political science, sociology, economics, and transportation departments can utilize the experiment in governmental consolidation and the activities which it will generate as a laboratory for investigative work. The university will reflect these unique geographical, governmental, economic, and social characteristics. Its major thrust will be in commerce, local and international trade, civic affairs, and transportation, and the curricula will be organized to focus on these areas.

The roles set forth here for each state university will allow a student to pursue training in a discipline offered at several universities in dissimilar situations. A sociology student, for example, is allowed to pursue his degree in a variety of institutional formats which could include urban or rural emphasis; applied or theoretical emphasis, local, national, or international emphasis depending upon his ultimate career objective. Thus, although curricular duplication appears to exist in the State University System, it is not only necessary duplication to accommodate large numbers of students, but it is also designed to give the students of the state alternative courses of action based on each institution's unique role in arriving at his ultimate goal. Nevertheless, the student who wishes to pursue a program limited to a single school, as for example, agriculture, must choose the university in the System which offers such a special program.

IV. College Age Population, Enrollment Trends and Projected Enrollments

A. *College Age Population in Florida*

In 1968, there were approximately 750,000 persons aged 18 to 24 living in Florida. By 1980, the number of college age persons will rise to 1,000,000. Nearly 65,000 students were graduated from high schools in Florida in 1968, and by 1980, the number of high school graduates is expected to exceed 90,000 (Figure 1). Enrollment in Florida's institutions of higher education, both public and private, totaled nearly 195,000 in 1968. In round numbers, the community colleges enrolled about 90,000 students, or about 45 per cent of all students who attend an institution of higher education in Florida. The State University System enrolled over 60,000 and the private institutions approximately 40,000 students.

B. *Enrollment Trends*

Although the private institutions have shown enrollment gains each year over the past decade, public institutions have registered the largest gains by far. And within the public sector, enrollment has been increasing much more rapidly in the community colleges than it has in the public universities. These trends, moreover, are expected to continue indefinitely. Increased college enrollment in Florida is brought about not only because there are more high school graduates each year, but because there has also been a steady rise in the percentage of high school graduates who attend college. In 1964, 49.7 per cent of Florida's high school graduates entered college; four years later, this percentage had risen to 55.3. The percentage of high school graduates who continued beyond high school varies from only 5 per cent in one Florida county to over 80 per cent in another county. It is significant for educational planners that generally the counties with the

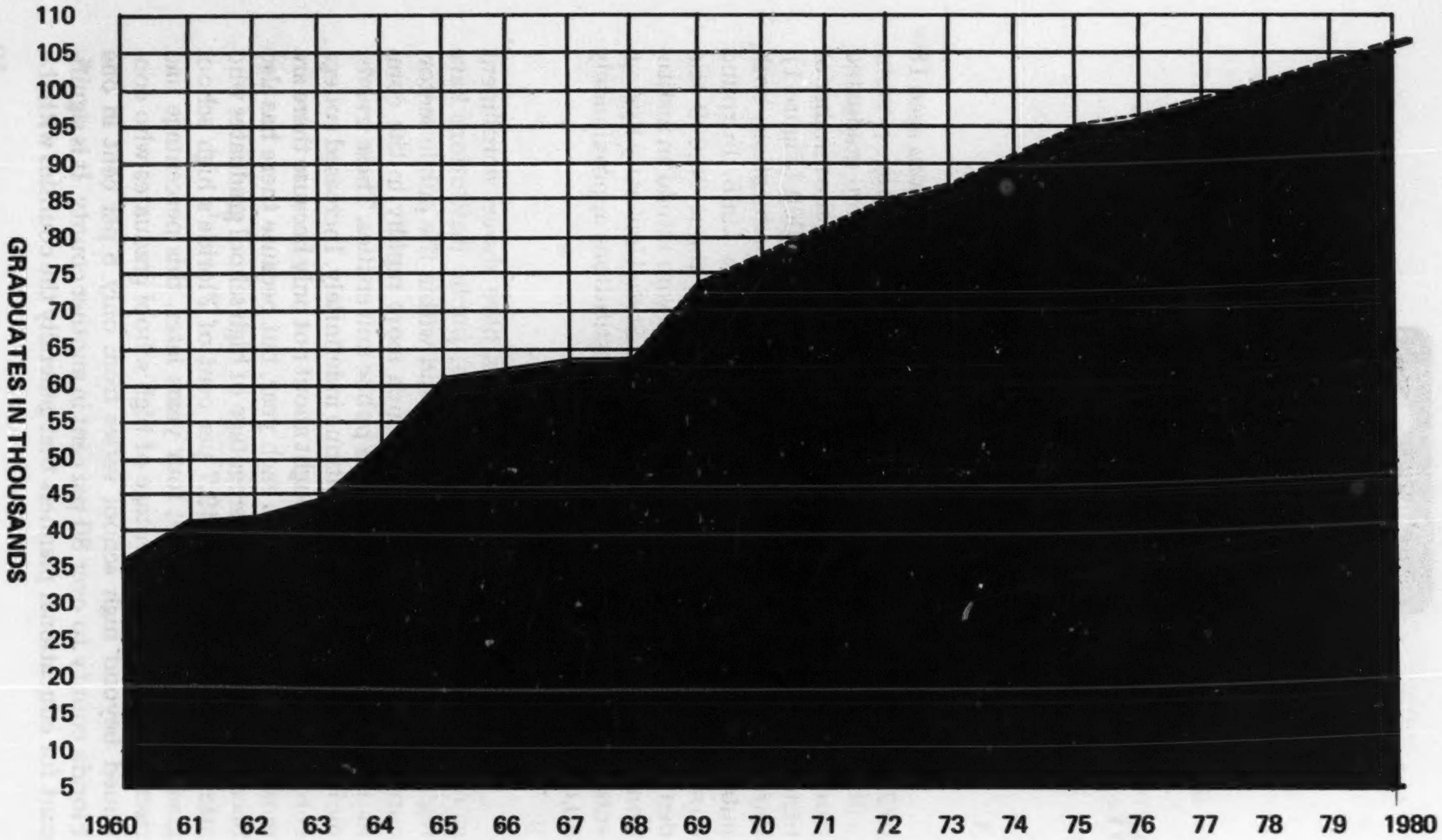


Figure 1. Florida public high school graduates, actual 1960-1968; projected 1969-1980
(Projections made by Dr. John Webb, Florida Atlantic University)

largest number of high school graduates also report the highest percentages of students who enter college.

The percentage of high school graduates entering college is expected to rise, moreover, and will exceed 60 per cent by 1980. Even though the community colleges will be affected more dramatically than the state universities by this increased ratio of college entrance, larger community college enrollments will ultimately and irrevocably lead to larger university enrollments at the upper level. Despite both the increasing number of high school graduates in Florida and the larger percentage of students entering higher education, the overall rate of change, or enrollment growth-rate, is expected to decrease in the coming years (Figure 2).

C. *Educational Planning and Enrollment Projections*

Enrollment projections are the matrix of information needed by governing boards in order to undertake responsible educational planning. The decision-making process which defines higher education goals and which assigns priorities to specific objectives within a period of time must be substantially keyed to existing and future enrollments. Laymen and educators alike are responsible both for improving the quality of the present educative process and for expanding such a process. This dual responsibility is given direction and substance by current and projected enrollments.

The enrollment projections for the present document have been produced by the Chancellor's staff working cooperatively with enrollment analysts in the universities. Each year these projections, which reach 10 years into the future, will be reviewed, revised, and extended for another year. The Regents will thus have continuing projections for a decade ahead. The projections yielded by the continuing study of future enrollment patterns will become basic components of subsequent CODE documents. Sections XIV, XV, and XVI of this document tie future instructional costs, space requirements, and faculty needs to expected enrollments. In the future, the enrollment analysts in the Chancellor's office will use a mean enrollment figure derived from the three-quarter academic year instead of basing their projections solely on fall enrollment data. Other bases will also be used in updating these projectives as required by legislative mandate. The gathering of information about current enrollments will become a part of the overall management information system.

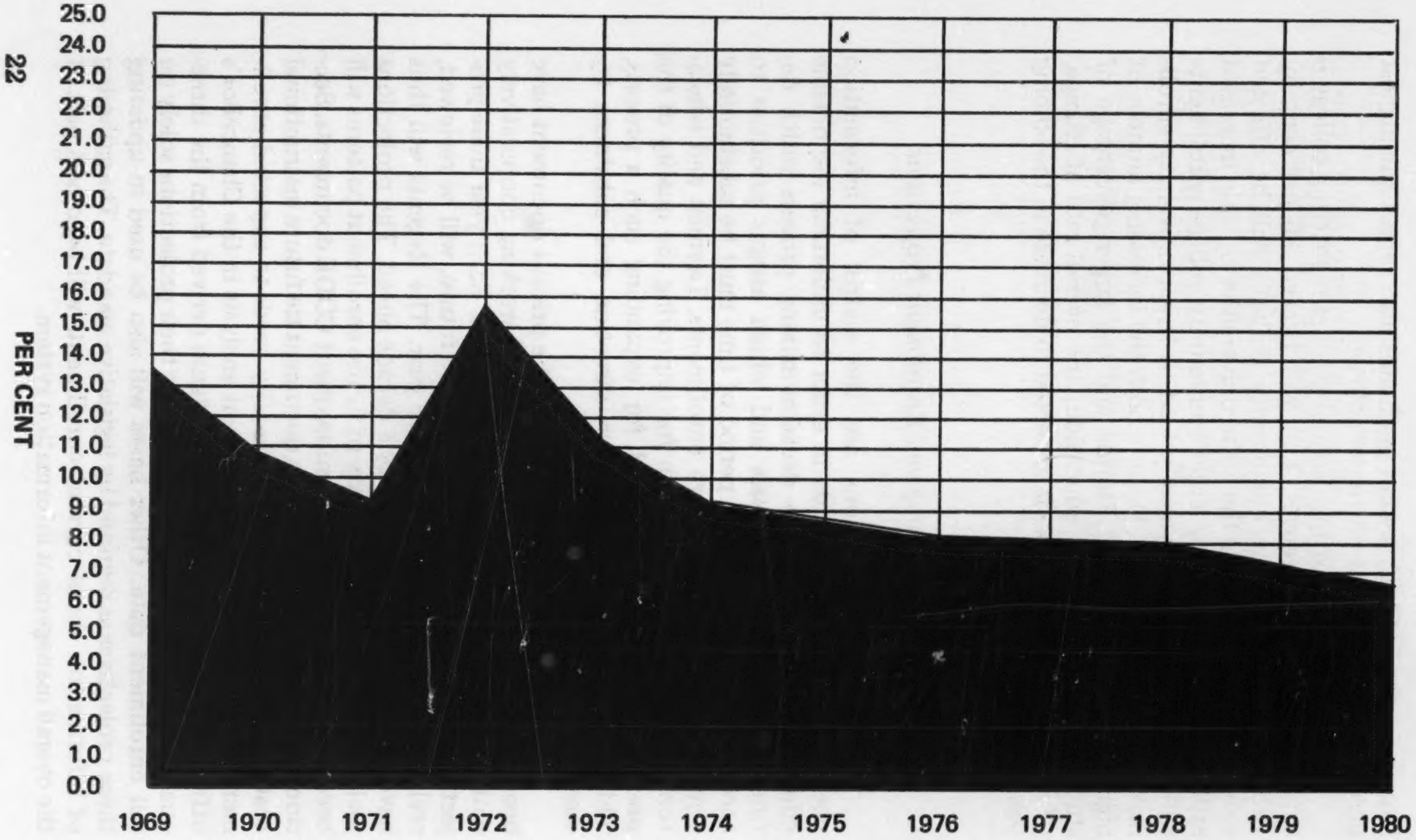


Figure 2. Rate of change in on-campus enrollment (FTE), State University System, 1969-1980.

1. Headcount and Fulltime Equivalent Enrollments

Enrollment in a college or university may be expressed in two ways: (a) as a headcount, or simply the number of students registered, regardless of whether they are taking one course or a full load, or (b) as fulltime equivalent students (FTE), a count arrived at by totaling the number of credit hours that students register for during a specified term and dividing by 15 at the undergraduate level or by 12 at the graduate level — the quotient in this ratio is called the FTE enrollment. In recent years, the FTE enrollment has become almost standard throughout the country as the most effective unit for budget planning purposes. Inasmuch as budgets must be prepared, submitted, and approved several years prior to the actual enrollment of students, budget officers have access to enrollment projections which are prepared 10 years ahead, thereby undergirding long-range planning even beyond the years involved in usual budget planning. Ratios between headcount and FTE enrollment can easily be developed for an institution to use in translating headcount figures into FTE data, or from FTE into headcount.

2. Lower Level Projections

In 1968, there was a 21,988 FTE enrollment in the State University System in freshman and sophomore courses; in 1980, the lower division FTE enrollment will rise to 32,696. The lower level will show a relatively small gain during the projection period for the following reasons: (a) the continued spectacular growth of the community colleges, (b) the trend toward establishing ceilings on freshman enrollments by the universities, (c) the two upper division universities to be added in 1972 will not include freshman and sophomore classes, and (d) the plan for the existing universities with four-year undergraduate programs to grow at the upper division and graduate level instead of at the lower division level.

3. Upper Level Projections

Two factors will bring about an explosive enrollment growth at the upper division level in the next decade: (a) the rapidly rising output of the community colleges, and (b) the continuation of the "open door" policy for entrance to the upper division of junior college graduates who have completed the college parallel program. At the present time, the available data base for quantifying the magnitude of the community college output in the years ahead is inadequate. The kinds of information still needed are:

Promotion and retention ratios for the community college student;

Promotion and retention ratios for lower level university students;

Ratios for the entry of graduating classes of the community colleges into the state universities;

Promotion and retention ratios for upper division students;

Ratios for the entry of baccalaureate degree students into graduate study; and

Promotion and retention ratios for beginning and advanced graduate students.

Although lower division enrollment in the public universities will show little growth, the tendency of the four-year institutions to select students of high ability for admission suggests that a significant decrease will occur in the drop-out rate for the freshman and sophomore years in the four-year universities leading to a marked increase in the percentage of lower division students successfully completing that division. The indication of higher yield from the lower division, together with the higher output of the community colleges, brings about the relatively rapid enrollment gains in the upper division.

At the present time, community college students who earn the Associate of Arts degree may transfer to upper division study without meeting any other condition. The use of a standardized test battery as one criterion governing admission to upper level work would, of course, control growth at the upper division. The projections which are included here, however, are based on the assumption that a test battery will not be used for such a purpose.

4. Graduate Level Projections

There are two levels of graduate study: beginning and advanced. Beginning graduate work (master's level) is that taken subsequent to completing the beginning graduate sequence. Beginning graduate FTE enrollment will increase from 5,966 in 1968 to 26,714 in 1980. Advanced graduate FTE enrollment over the same twelve-year period will rise from 2,532 to 7,180. In 1968, two of Florida's three largest metropolitan areas — Miami and Jacksonville — had no public university. The University of South Florida located in Tampa, the third largest population center in Florida, reached a graduate enrollment of nearly 3,000 students in less than ten years. The Miami and Jacksonville institutions, from 1972 to 1980, are expected to grow to have a combined graduate FTE enrollment of 3,187. Because of the dramatic rise in upper level enrollment, which in turn leads to an ever-increasing number of baccalaureate degrees awarded, graduate enrollment will rise throughout the System.

Two of Florida's recently established institutions — Florida Technological University and the University of West Florida — have just begun to offer graduate courses. By 1980, these two new institutions will enroll nearly 6,000 graduate students (FTE) or about 84 per cent of the combined present-day graduate enrollments of Florida State University, the University of Florida, and the University of South Florida.

D. *Enrollment Mix*

"Mix," when used in an enrollment context, refers to various sub-groups of students within the total population of students attending an institution. Universities frequently refer to their mix according to sex, age, race, and majors. Generally, determining enrollment mix according to such variables lies within the university's sphere of autonomous policy-making. There is also an enrollment mix, however, that results from the proportionate number of students enrolled by level. Since the enrollment mix of a university determined by the relative numbers of students enrolled by level relates directly to the institution's educational purpose, it thereby becomes a factor in systemwide planning. For example, if an institution rapidly increases its number of advanced graduate students and holds down its enrollment at the lower level, it will clearly be moving toward a role as a graduate study center. Conversely, if an institution confines its graduate offerings to selected master's degree programs, and, at the same time, expands its undergraduate enrollment, it will retain its principal purpose as an undergraduate institution. In this planning, decisions are made about where growth will take place. Student "mix" by level, therefore, becomes an important variable for consideration by the Board of Regents, and cannot be left to policy decisions by individual institutions.

The decision that the two new institutions will be upper division means that the imposition of enrollment ceilings on freshmen, now in effect at the University of Florida and at Florida State University, will probably become by 1975 a systemwide policy for all institutions having four-year undergraduate programs, with the exception of Florida Agricultural and Mechanical University. At the present time, no ceilings on junior level enrollment are in effect. The lower level and upper level mix of the Florida State University, the

University of Florida, the University of South Florida, and Florida Technological University will change substantially by 1980, with upper division enrollment growing at a relatively more rapid pace. Table 1 shows the enrollment mixes for the seven existing universities, which have been computed from previous enrollments and estimated mixes based on projected enrollments. These figures are expressed as ratios.

The enrollment mix between beginning graduate and advanced graduate study at the same four institutions will also change in the years ahead. Advanced graduate and professional enrollment will increase more rapidly in these institutions than at Florida Agricultural and Mechanical University, the University of West Florida, and Florida Atlantic University, where offerings at the advanced graduate and professional levels will be limited. At the present, the planning for the new upper division institutions in Miami and Jacksonville envisions limited offerings at the advanced and professional levels. Long-range planning, however, must exhibit enough flexibility to allow for additional advanced graduate and professional programs at the upper division levels if a sufficient demand for such programs becomes manifest.

E. *Institutional Enrollment Projections, 1969 - 1980*

Projections for the next twelve years are set forth in headcount (Table 2) and in fulltime equivalent terms (Table 3). The projections are by institution and by level (lower division, upper division, beginning graduate and advanced graduate). Not only are enrollment projections for the existing institutions shown in these tables, but projections for the two institutions of higher learning to be established in 1972 are also provided.

F. *Assumptions Underlying Initial Set of Enrollment Projections*

The enrollment projections presented in this document are based on a set of assumptions. In effect, these assumptions are statements of anticipated educational policies as these relate to enrollment trends and developments. The following assumptions were used in deriving the projections in Tables 2 and 3:

1. That no further public universities will be established in Florida during the time covered by the projections other than Florida International University in Miami and the University of North Florida in Jacksonville.

2. That advanced graduate (post-master's) study will be

TABLE 1

Ratio of Headcount to Total University Headcount by Level

(Actual 1968; Projected 1970, 1975, and 1980)

		1968	1970	1975	1980
FAMU	Lower	.62	.59	.59	.59
	Upper	.29	.27	.28	.29
	Beginning Graduate	.09	.14	.13	.12
	Advanced Graduate	—	—	—	—
FAU	Lower	—	—	—	—
	Upper	.75	.75	.73	.72
	Beginning Graduate	.25	.24	.25	.26
	Advanced Graduate	—	.01	.02	.02
FSU	Lower	.33	.33	.26	.21
	Upper	.44	.44	.48	.51
	Beginning Graduate	.16	.16	.18	.19
	Advanced Graduate	.07	.07	.08	.09
FTU	Lower	.60	.61	.33	.22
	Upper	.40	.35	.49	.51
	Beginning Graduate	—	.04	.17	.25
	Advanced Graduate	—	—	.01	.02
UF	Lower	.36	.34	.27	.22
	Upper	.43	.44	.47	.50
	Beginning Graduate	.15	.15	.18	.20
	Advanced Graduate	.06	.07	.08	.08
USF	Lower	.41	.33	.21	.15
	Upper	.43	.47	.53	.56
	Beginning Graduate	.16	.19	.25	.27
	Advanced Graduate	—	.01	.01	.02
UWF	Lower		—	—	—
	Upper	1.00	.88	.80	.75
	Beginning Graduate	—	.12	.19	.23
	Advanced Graduate	—	—	.01	.02
FIU	Lower	—	—	—	—
	Upper	—	—	.83	.80
	Beginning Graduate	—	—	.17	.19
	Advanced Graduate	—	—	—	.01
UNF	Lower	—	—	—	—
	Upper	—	—	.79	.70
	Beginning Graduate	—	—	.21	.29
	Advanced Graduate	—	—	—	.01
Total	Lower	.34	.32	.21	.16
	Upper	.47	.48	.56	.58
	Beginning Graduate	.15	.16	.19	.22
	Advanced Graduate	.04	.04	.04	.04

TABLE 2
ON–CAMPUS ENROLLMENT BY LEVEL, BY INSTITUTION
ACTUAL (1968) AND PROJECTED (1969-80)
STATE UNIVERSITY SYSTEM OF FLORIDA

INST.	level	1968 HC	1969 HC	1970 HC	1971 HC	1972 HC
FAMU	LOWER	2,463	2,617	2,624	2,843	2,936
	UPPER	1,116	1,183	1,188	1,289	1,330
	BEG. GRAD.	368	441	605	678	677
	ADV. GRAD.	–	–	–	–	–
	TOTAL	3,947	4,241	4,417	4,810	4,943
FAU	LOWER	–	–	–	–	–
	UPPER	3,281	3,720	3,990	4,062	4,431
	BEG. GRAD.	1,067	1,266	1,295	1,355	1,463
	ADV. GRAD.	–	–	65	83	85
	TOTAL	4,348	4,986	5,350	5,500	5,979
FSU	LOWER	5,299	5,833	6,392	6,561	6,703
	UPPER	7, 153	7,879	8,634	9,507	10,409
	BEG. GRAD.	2,618	2,889	3,166	3,493	3,829
	ADV. GRAD.	1,231	1,346	1,475	1,616	1,759
	TOTAL	16,301	17,947	19,667	21,177	22,700
FTU	LOWER	900	2,021	2,874	3,295	3,679
	UPPER	599	1,264	1.645	2.664	3.688
	BEG. GRAD.	–	84	193	544	935
	ADV. GRAD.	–	–	–	–	–
	TOTAL	1,499	3,369	4,712	6,503	8,302
UF	LOWER	7,115	7,400	7,490	7,560	7,560
	UPPER	8,486	9,188	9,823	10,558	11,171
	BEG. GRAD.	2,954	3,199	3,420	3,697	3,986
	ADV. GRAD.	1,294	1,395	1,492	1,599	1,731
	TOTAL	19,849	21,182	22,225	23,414	24,448
USF	LOWER	4,937	5,046	5,048	5,058	5,061
	UPPER	5,085	6,269	7,238	8,138	9,320
	BEG. GRAD.	1,921	2,516	3,021	3,738	4,395
	ADV. GRAD.	–	70	108	132	157
	TOTAL	11,943	13,901	15,415	17,066	18,933
UWF	LOWER	–	–	–	–	–
	UPPER	2,499	2,835	3,336	3,857	4,624
	BEG. GRAD.	–	315	444	602	798
	ADV. GRAD.	–	–	–	–	18
	TOTAL	2,499	3,150	3,780	4,459	5,440
FIU	LOWER	–	–	–	–	–
	UPPER	–	–	–	–	3,902
	BEG. GRAD.	–	–	–	–	350
	ADV. GRAD.	–	–	–	–	–
	TOTAL	–	–	–	–	4,252
UNF	LOWER	–	–	–	–	–
	UPPER	–	–	–	–	1,500
	BEG. GRAD.	–	–	–	–	254
	ADV. GRAD.	–	–	–	–	–
	TOTAL	–	–	–	–	1,754
TOTAL	LOWER	20,714	22,917	24,428	25,317	25,939
	UPPER	28,219	32,338	35,854	40,075	50,375
	BEG. GRAD.	8,928	10,710	12,144	14,107	16,687
	ADV. GRAD.	2,525	2,811	3,140	3,430	3,750
	TOTAL	60,386	68,776	75,566	82,929	96,751

1973 HC	1974 HC	1975 HC	1976 HC	1977 HC	1978 HC	1979 HC	1980 HC
3,004	3,085	3,163	3,263	3,363	3,463	3,563	3,663
1,396	1,449	1,502	1,566	1,631	1,697	1,763	1,832
675	677	682	697	712	727	738	749
—	—	—	—	—	—	—	—
5,075	5,211	5,347	5,526	5,706	5,887	6,064	6,244
—	—	—	—	—	—	—	—
4,802	5,094	5,510	5,708	5,982	6,271	6,504	6,827
1,622	1,786	1,906	2,016	2,116	2,228	2,308	2,408
96	117	120	135	144	156	195	204
6,520	6,997	7,536	7,859	8,242	8,655	9,007	9,439
6,826	6,916	6,984	6,984	6,984	6,984	6,984	6,984
11,327	12,279	13,260	13,940	14,660	15,520	16,330	17,000
4,179	4,536	4,902	5,314	5,801	6,082	6,262	6,331
1,907	2,054	2,203	2,388	2,601	2,732	2,813	2,844
24,239	25,785	27,349	28,626	30,046	31,318	32,389	33,159
4,026	4,337	4,609	4,758	4,907	5,057	5,817	6,601
4,718	5,753	6,795	8,265	9,639	11,667	13,415	15,226
1,368	1,841	2,354	3,346	4,585	5,748	6,603	7,494
31	62	90	193	296	336	367	416
10,143	11,993	13,848	16,562	19,427	22,808	26,202	29,737
7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560
11,820	12,480	13,178	13,906	14,663	15,450	16,269	17,127
4,288	4,601	4,922	5,274	5,647	6,038	6,449	6,870
1,870	2,013	2,161	2,303	2,450	2,604	2,768	2,944
25,538	26,654	27,821	29,043	30,320	31,652	33,046	34,501
5,117	5,167	5,220	5,220	5,220	5,220	5,220	5,220
10,584	11,675	12,998	14,065	15,132	16,296	17,460	18,624
4,992	5,529	6,010	6,599	7,187	7,775	8,363	8,951
206	256	306	354	403	451	499	547
20,899	22,627	24,534	26,238	27,942	29,742	31,542	33,342
—	—	—	—	—	—	—	—
5,632	6,395	7,116	7,805	8,469	9,105	9,700	10,263
1,082	1,368	1,653	1,947	2,247	2,553	2,842	3,158
31	47	68	95	126	163	221	263
6,745	7,810	8,837	9,847	10,842	11,821	12,763	13,684
—	—	—	—	—	—	—	—
5,404	6,895	8,412	9,895	11,443	12,952	14,453	15,995
791	1,229	1,670	2,106	2,550	2,988	3,424	3,879
—	—	—	20	40	60	90	120
6,195	8,124	10,082	12,021	14,033	16,000	17,967	19,994
—	—	—	—	—	—	—	—
2,320	2,534	2,887	3,202	3,698	4,402	5,197	6,007
397	595	757	1,000	1,297	1,650	2,000	2,453
—	—	—	10	20	35	50	75
2,717	3,129	3,644	4,212	5,015	6,087	7,247	8.535
26,533	27,065	27.536	27,785	28,034	28.284	29,144	30,028
58,003	64,554	71,658	78,352	85,317	93,360	101,091	108,901
19,394	22,162	24,856	28,299	32,142	35,789	38,989	42,293
4,141	4,549	4,949	5,498	6,080	6,537	7,003	7,413
108,071	118,330	128,998	139,934	151,573	163,970	176,227	188,635

TABLE 3
ON–CAMPUS FULL TIME EQUIVALENT (FTE) ENROLLMENT BY LEVEL, BY INSTITUTION ACTUAL (1968) AND PROJECTED (1969-80) STATE UNIVERSITY SYSTEM OF FLORIDA

INST.	LEVEL	1968 FTE	1969 FTE	1970 FTE	1971 FTE	1972 FTE
FAMU	LOWER	2,526	2,600	2,700	2,834	2,936
	UPPER	1,173	1,342	1,413	1,446	1,479
	BEG, GRAD.	156	200	200	279	279
	ADV. GRAD.	–	–	–	–	–
	TOTAL	3,855	4,142	4,313	4,559	4,694
FAU	LOWER	–	–	–	–	–
	UPPER	3,084	3,500	3,700	3,963	4,314
	BEG. GRAD.	491	600	650	677	728
	ADV. GRAD.	–	–	50	61	65
	TOTAL	3,575	4,100	4,400	4,701	5,107
FSU	LOWER	6,272	6,300	6,425	6,820	7,215
	UPPER	5,979	7,000	8,000	8,651	9,302
	BEG. GRAD.	2,101	2,500	2,825	3,059	3,292
	ADV. GRAD.	1,287	1,424	1,624	1,766	1,908
	TOTAL	15,639	17,224	18,874	20,296	21,717
FTU	LOWER	922	1,800	2,390	2,836	3,282
	UPPER	350	1,000	1,500	2,422	3,344
	BEG. GRAD	–	60	110	291	472
	ADV. GRAD.	–	–	–	–	–
	TOTAL	1,272	2,860	4,000	5,549	7,098
UF*	LOWER	8,012	8,400	8,570	8,704	8,774
	UPPER	6,900	7,500	8,100	8,769	9,356
	BEG. GRAD.	2,025	2,389	2,856	2,996	3,136
	ADV. GRAD.	1,245	1,370	1,491	1,602	1,740
	TOTAL	18,182	19,659	21,017	22,071	23,006
USF	LOWER	4,256	4,100	4,100	4,180	4,260
	UPPER	5,242	6,655	8,087	8,900	10,000
	BEG..GRAD.	1,193	1,350	1,543	1,979	2,415
	ADV. GRAD.	–	40	70	85	100
	TOTAL	10,691	12,145	13,800	15,144	16,775
UWF	LOWER	–	–	–	–	–
	UPPER	2,380	2,700	3,177	3,674	4,404
	BEG. GRAD.	–	300	423	573	760
	ADV, FRAD.	–	–	–	–	17
	TOTAL	2,380	3,000	3,600	4,247	5,181
FIU	LOWER	–	–	–	–	–
	UPPER	–	–	–	–	3,512
	BEG. GRAD.	–	–	–	–	154
	ADV. GRAD.	–	–	–	–	–
	TOTAL	–	–	–	–	3,666
UNF	LOWER	–	–	–	–	–
	UPPER	–	–	–	–	1,350
	BEG. GRAD.	–	–	–	–	112
	ADV. GRAD.	–	–	–	–	–
	TOTAL	–	–	–	–	1,462
TOTAL	LOWER	21,988	23,200	24,185	25,374	26,467
	UPPER	25,108	29,697	33,977	37,825	47,061
	BEG. GRAD.	5,966	7,399	8,607	9,854	11,348
	ADV. GRAD.	2,532	2,834	3,235	3,514	3,830
	TOTAL	55,594	63,130	70,004	76,567	88,706

*Excludes: Institute of Food and Agricultural Sciences and Health Center

1973 FTE	1974 FTE	1975 FTE	1976 FTE	1977 FTE	1978 FTE	1979 FTE	1980 FTE
3,039	3,141	3,244	3,347	3,449	3,552	3,654	3,757
1,513	1,546	1,579	1,646	1,714	1,784	1,853	1,925
281	285	289	295	302	308	313	318
—	—	—	—	—	—	—	—
4,833	4,972	5,112	5,288	5,465	5,644	5,820	6,000
—	—	—	—	—	—	—	—
4,667	4,946	5,345	5,537	5,803	6,083	6,309	6,690
803	880	934	988	1,037	1,092	1,131	1,180
74	81	92	104	111	120	150	157
5,544	5,907	6,371	6,629	6,951	7,295	7,590	8,027
7,610	8,005	8,401	8,427	8,460	8,488	8,513	8,530
9,953	10,604	11,253	11,878	12,538	13,320	14,055	14,661
3,527	3,761	3,994	4,349	4,765	5,014	5,176	5,244
2,050	2,192	2,333	2,541	2,781	2,930	3,026	3,066
23,140	24,562	25,981	27,195	28,544	29,752	30,770	31,501
3,728	4,174	4,619	4,854	4,951	5,057	5,815	6,600
4,266	5,188	6,109	7,720	9,490	11,744	13,502	15,324
653	834	1,014	1,442	1,976	2,477	2,852	3,237
10	20	29	62	96	109	111	126
8,657	10,216	11,771	14,078	16,513	19,387	22,280	25,287
8,844	8,913	8,980	9,047	9,113	9,179	9,242	9,309
9,975	10,621	11,301	12,016	12,762	13,545	14,361	15,228
3,276	3,416	3,557	3,840	4,142	4,459	4,798	5,146
1,885	2,035	2,191	2,351	2,520	2,696	2,887	3,093
23,980	24,985	26,029	27,254	28,537	29,879	31,288	32,776
4,340	4,420	4,500	4,500	4,500	4,500	4,500	4,500
11,200	12,200	13,400	14,500	15,600	16,800	18,000	19,200
2,851	3,287	3,726	4,091	4,456	4,820	5,185	5,550
130	160	190	220	250	280	310	340
18,521	20,067	21,816	23,311	24,806	26,400	27,995	29,590
—	—	—	—	—	—	—	—
5,364	6,075	6,760	7,415	8,045	8,650	9,215	9,750
1,030	1,300	1,570	1,850	2,135	2,425	2,700	3,000
30	45	65	90	120	155	210	250
6,424	7,420	8,395	9,355	10,300	11,230	12,125	13,000
—	—	—	—	—	—	—	—
5,026	6,550	8,160	9,598	11,100	12,563	14,019	15,515
364	590	802	1,011	1,224	1,434	1,644	1,862
—	—	—	15	30	46	68	91
5,390	7,140	8,962	10,624	12,354	14,043	15,731	17,468
—	—	—	—	—	—	—	—
2,158	2,407	2,800	3,106	3,587	4,270	5,041	5,827
183	286	363	480	623	792	960	1,177
—	—	—	8	15	27	38	57
2,341	2,693	3,163	3,594	4,225	5,089	6,039	7,061
27,561	28,653	29,744	30,175	30,473	30,776	31,724	32,696
54,122	60,137	66,707	73,416	80,639	88,759	96,355	104,120
12,968	14,639	16,249	18,346	20,660	22,821	24,759	26,714
4,179	4,533	4,900	5,391	5,923	6,363	6,800	7,180
98,830	107,962	117,600	127,328	137,695	148,719	159,638	170,710

offered in limited disciplines at Florida Atlantic University beginning in the fall of 1970, at the University of West Florida beginning in 1972-73, at Florida Technological University beginning in 1973-74, and at the proposed Miami and Jacksonville institutions beginning in the fall of 1976.

3. That advanced graduate enrollment will not develop at Florida Agricultural and Mechanical University by 1980.

4. That curricular changes will occur at Florida Agricultural and Mechanical University which will result in a steady enrollment gain, both at the lower and upper levels.

5. That the Miami and Jacksonville institutions will be funded to allow them to experience the same relative enrollment growth, except that the Miami institution will begin its growth from an enrollment base approximately two and one-half times as large as the Jacksonville institution.

6. That the Miami and Jacksonville institutions will be upper division only with an evening enrollment which will not exceed 15 per cent of their daytime enrollments.

7. That the ratio between headcount and FTE enrollment for Florida State University and the University of Florida will remain essentially the same as the ratio reflected by past enrollment data, and that the ratio between headcount and FTE enrollment for institutions which are located in large population centers will be relatively lower (similar to that of the University of South Florida).

8. That institutions located in or near very large cities (certainly the University of South Florida, the Miami and Jacksonville institutions, Florida Atlantic University, and probably the University of West Florida and Florida Technological University as well), will for some years to come give latitude to students who wish to enroll for less than a full course load. This policy will differ significantly from the more rigorous requirements at the University of Florida or Florida State University.

9. That sites selected for the Miami and Jacksonville institutions will be accessible to commuting students and designed as commuting universities to allow the institutions to attract mainly students who are not generally able to attend a senior university away from home. The two new institutions will, moreover, principally absorb the output of the community colleges located in their general areas which will substantially increase in the years ahead.

10. That present ceilings on lower level enrollment at the University of Florida and Florida State University will continue

to be imposed and that, beginning in 1974, lower division enrollment will become constant throughout the System except at Florida Agricultural and Mechanical University.

11. That no ceilings will be imposed on upper division enrollments and selected graduate programs throughout the System.

12. That the ratio between upper division and graduate level enrollment, stabilized at Florida State University and the University of Florida over the past decade, will serve as a tentative norm for the new institutions in expanding their graduate enrollments in the future.

13. That the ratio between beginning and advanced graduate study at the University of Florida and Florida State University observed in 1968 will tend to remain relatively stable, but will nevertheless increase slightly.

14. That the ratio between beginning and advanced graduate study at the new institutions, including the University of South Florida, will increase during the period of the projections, but will not reach the magnitude of the similar ratios derived from the University of Florida and Florida State University.

15. That enrollment gains in advanced graduate study at the newer universities, including Miami and Jacksonville will derive principally from demand for doctorates in professional education.

16. That present policies which govern the admissions of transfer students from the community colleges will be continued through 1980.

17. That there will be no major changes in the general education requirements for transfer students through 1980.

18. That a standardized test battery will not be used as a screening device for admitting students to upper division study before 1980.

19. That undergraduate FTE enrollment will continue to be derived from course registrations subject to classification by level, instead of student enrollments based upon the level assigned to the students by the university. (A senior enrolled in a graduate level course would contribute to the graduate FTE enrollment; a junior enrolled in a freshman course would contribute to lower level FTE enrollment.)

20. That law school enrollment, through the degree J.D., and medical school enrollment, through the degree M.D., will be classified as beginning graduate enrollment.

21. Graduate programs in law and medicine will be

classified as advanced graduate enrollment.

22. That the rate of gain of total enrollment of existing universities will decrease for several years after 1972, the date that the Miami and Jacksonville institutions are scheduled to open.

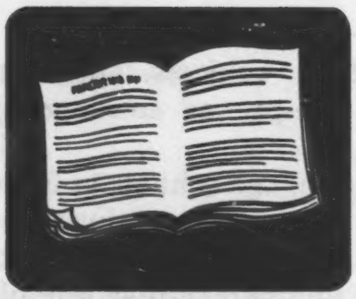
23. That the present ratio of high school graduates entering college, which is .55, will exceed .60 by 1980.

24. That although the absolute number of out-of-state persons entering public universities in Florida will increase, this number, as expressed in percentage terms, will remain relatively constant from 1969 to 1980.

25. That the 1968 enrollment at each institution as a percentage of total systemwide enrollment will not remain constant, but will shift gradually in the direction of the newer institutions having larger percentages than those computed for 1968.

G. *Maintaining and Updating Enrollment Projections*

Each year the enrollment projections will be reviewed in the light of actual enrollments most recently recorded and revised, and the assumptions which underlie the initial enrollment projections presented in this document will be reassessed and updated. Enrollment analysts in the universities will be asked to submit drafts of revised and extended projections, which will be reviewed and combined into systemwide projections by the Chancellor's staff. The Chancellor's staff will publish a single set of projections annually for use in budget planning within the proposed guidelines of PPBS. The Chancellor's staff, finally, will make available to community colleges and other institutions of higher education in Florida any models, rationales, and procedures which it may develop in the process of refining and updating their enrollment projections.



V. Admissions

A. *Systemwide Admission Policies*

Admission policies are established by the Board of Regents with the concurrence of the State Board of Education. Summaries are presented here of specific policies for the admission of freshman and transfer students to the lower division, for the admission of upper division students, including junior college transfers, and for the admission of baccalaureate degree students to graduate study. Differential admission practices that have emerged among universities in the State University System within the framework of basic admission policies promulgated by the Board are then described. Following the discussion of such actual admission practices, suggested changes in these practices intended to aid in attaining the long-range educational objectives of the State University System are proposed.

B. *Admission to the Lower Division*

Students who (a) have graduated from an accredited high school with satisfactory grade averages in all academic subjects, and (b) have attained a score at the 60th percentile or higher on the Florida Statewide Twelfth Grade Testing Program (a battery containing a test of academic aptitude, and achievement measures in English, social studies, natural science, mathematics, and reading) are academically eligible for admission to the state universities. In cases where the Florida test is not available, however, students may be admitted on the basis of a series of tests judged to be equivalent. Provisions are also made for students who are graduates of non-accredited high schools and for students who show academic promise but who fall below either the acceptable test score or the prescribed high school average for all academic subjects. These exceptions are limited, though, and serve simply as contingency elements in basic admissions policies.

The output of the high schools in Florida continues to rise, although a decline in the rate of increase in the size of each year's graduating class is projected. A strategy employed to cope with the large numbers of high school graduates seeking to enter the public universities has been the imposition of ceilings on freshman enrollment at two universities, a strategy that in all likelihood may be used at other public universities with lower divisions in the years immediately ahead.

Students may transfer from the lower division of one public university to the lower division of another if they are in good academic standing. Students who transfer from a community college prior to graduation are treated as any other transfer student provided they would have been qualified to enter the receiving institution as a freshman.

Junior college transfers are considered to have met the state approved lower division general education requirements of the receiving senior institution if the community college certifies that the students have completed the lower division general education requirements at the community college.

Admission of students from outside the State University System and the community colleges is governed by the students' academic average as shown on official transcripts and by level of performance on specified tests of general ability.

C. *Admission to the Upper Division*

A student who has completed his freshman and sophomore years successfully in a public university in Florida is eligible for admission to upper division schools and colleges. Having "successfully completed" his first two years means generally that a student must have maintained a "C" average. A student who has successfully completed the college parallel program of the community college is also eligible for admission to upper division study. In other words, requirements for admission to upper division study in a Florida public university are the same for the community college graduates who have completed the college parallel course as they are for the students who complete the first two years on a university campus. Some upper division programs of study have special requirements that a student must meet regardless of whether he comes from a community college or the lower division of a senior university.

As a result, a community college student who has successfully completed the college parallel course and is thereby eligible for admission to upper division study may be required to make up additional lower division prerequisites, such as pre-professional courses, when he is enrolled in upper division work.

As in the case of transfer students who wish to enter the lower division from outside the State University System and the community colleges, out-of-state transfer students applying to enter the upper division must provide official transcripts and their scores on specified tests of general ability. The evaluation of these supporting documents and the determination of applicant eligibility is within the jurisdiction of each university.

Present enrollment projections indicate that the greatest gain in enrollment in the State University System during the next ten years will be at the upper division level. Rapidly expanding upper division enrollment has come about, and will continue to occur because of the increasing output of the community colleges. Upper division institutions within the State University System should prevent any serious imbalance in enrollment by level in the public universities.

Some educators have proposed that the performance of lower division students on a standardized test be used as one criterion for admission of students to upper division work. No consensus among educators in Florida has been reached, however, about the use of a standardized test to screen students who seek admission to the junior year of undergraduate study.

D. *Admission to Graduate Study*

All persons seeking to enter programs of study leading to graduate degrees must, with rare exceptions, (a) possess the baccalaureate degree, (b) present a transcript that shows generally a "B" average for the last two years of undergraduate work, and (c) obtain a specified score on the combined verbal and quantitative sections of the aptitude test of the Graduate Record Examinations.

The Graduate Record Examinations serve not only as an admission screening test, but provide information that is useful in counseling the entering graduate student, much in the same way that the Florida Statewide Twelfth Grade Tests have been used in counseling the entering freshmen. Each university will establish its own admissions standards, including the level of performance on the GRE above the minimum cutoff; these admissions standards do not necessarily have to be uniform throughout the graduate school of a university, but may vary among departments.

Applicants seeking admission to graduate professional study (law, medicine, and in some instances advanced study in business) must present a satisfactory transcript of their undergraduate work, together with a required score on a specific battery of tests such as the Medical College Admissions Test or the Law School Admissions Test.

E. *Admission to Post-Baccalaureate Study*

Universities offer post-baccalaureate programs of study that do not lead to graduate degrees. Admission to this post-baccalaureate work, including courses leading to teacher certification, are not governed by the admissions standards established for graduate programs of study leading to graduate degrees, but are determined largely by the nature and purpose of the post-baccalaureate program itself.

F. *Admission Practices*

Adoption of systemwide admissions policies have not resulted in uniform undergraduate admissions practices among the state universities. At the present time, for example, various state universities have established differing deadlines for receiving applications, for notifying students of acceptance or rejection, and for remitting fees and deposits. The lack of uniformity among the state universities in these practices, coupled with the development of ceilings on freshman enrollments which are imposed at Florida State University and the University of Florida, have contributed to the enrollment of a larger percentage of students of high academic ability in these two institutions than in the other state universities. Since these two institutions encourage early application for the fall term, they are able to select initially from a large pool of applications the students whose previous records reflect high academic promise.

Qualified students who are not readily admitted to the universities with ceilings on freshman enrollment may subsequently gain admission if they persist in their efforts to be admitted, instead of turning to another institution when failing to be admitted under the early admission policies of the institution of their first choice. Also, students may heighten their chances of entering their preferred institution if they show a willingness to enroll at any term other than the fall term, especially during the summer.

Although not all public universities with lower divisions currently place a ceiling on freshman enrollment, the University of South Florida and Florida Technological University may find the practice necessary in the future. Florida Agricultural and Mechanical University, however, does not appear to be faced with having to limit its freshman enrollment during the next decade.

Some of the universities are unable to admit qualified students who wish to pursue a specific program of study simply because no more students can be accepted in these programs. A student who fails to gain admission to the institution of his first choice because of space restrictions in a specific program at that institution must either re-apply for another term, shift temporarily to another program of study, or apply elsewhere.

The increasing emphasis currently being placed on early admissions by the University of Florida and Florida State University, though, does intensify the need for clear-cut systemwide practices in setting application deadlines, in sending out notices of acceptance or rejection, and in collecting fees and readmitting dropouts. Moreover, each university in the System has developed its own application forms. Students who apply to more than one institution often find themselves sending the same personal information to several state institutions. Universities do not consult with each other concerning available openings for new students, and thus they cannot advise applicants rejected by one state university about other state universities that might have room for them. State universities have also designed their own transcript forms, usually without consultation with other institutions in the System. This lack of transcript uniformity impedes the ready transfer of student credit from one institution to another. The interchangeability of credit between the community colleges and the State University System becomes a difficult undertaking in some instances, not only because of dissimilar transcripts, but also because of differential practices in recording incomplete and failing grades.

G. *Considerations for Improved Systemwide Coordination of Admissions*

The development of a program for increased coordination of admissions policies and practices has been instituted by the

Chancellor's office. A special committee on the feasibility of greater admissions coordination has been established.

Some of the basic points to be reviewed by the special committee will be:

1. The possibility of having a common admissions form, common admissions data, common application fee, and other similar items for the State University System's admission program.
2. The possibility of having a student data bank that will contain the full range of student information about Florida high school graduates on file for each institution within the State University System.
3. The possibility of establishing an admissions information center which would provide applicants to the state universities with information about admission to each of the state universities.
4. The possibility of developing a unified approach to the transfer process of the public community college graduates to the public universities. This process would include such items as a more unified procedure for interchanging credit among the state universities and junior colleges, a more effective orientation program for the junior college transfer students on the university campus, and a more effective counseling program for the junior college students upon arrival at the state university. Other similar issues will be reviewed by the special committee with the desire to improve the articulation and coordination between the public junior colleges and the state universities.

VI. Defining the Needs for Academic Programs

By 1972 the State University System of Florida will consist of nine degree-granting institutions of higher learning. These institutions, collectively, must provide the citizens of Florida with higher educational opportunities in all disciplines and at all levels with necessary but not wasteful duplication and without unwarranted proliferation of programs. The number of quality programs that can be provided by our state universities, however, is necessarily a function of the financial resources made available to them by the Legislature. Although the Legislature has increased and will continue to increase its allocation for higher education each year, the projected annual rate of increase in student enrollment will place increasing financial pressures on both the state and the universities. New approaches to the problem of providing quality education for this large number of students must be developed through careful academic planning. In response to concerns expressed by members of the Board of Regents and by the State Legislature, criteria have been established to provide guidance in the planning of the various curricula and programs which will be required to meet the rapidly changing needs of a growing population. These criteria have evolved from the assumption that it is in the best interests of all of the universities in the System that the quality of the several degrees be protected.

There are three kinds of demonstrated needs for university programs, namely, societal, student, and faculty. *Societal needs* may be measured by the actual and projected number of unfilled positions in business, industry, education, and the professions and by the shortage of individuals with specialized training to fill them. Universities must provide certain programs, therefore, to train more individuals in special fields where such shortages exist. *Student need* for a program may be measured by the number of people who would actually enroll if it were offered. Societal needs and student demands for specific programs may not necessarily be mutually supportive. Even though a shortage of highly trained specialists may exist in a certain field of knowledge, the enrollments in curricula offered to train people in these fields may be insufficient to make them economically feasible. *Faculty need* for programs is difficult to measure objectively. Some university administrators contend that a Ph.D. program in certain areas is necessary to attract outstanding teachers and researchers to their faculties. Faculty members claim that even though master's programs are available, Ph.D. programs are essential to attract talented graduate students, some of whom will provide valuable teaching and research support. The relative importance of each need (societal, student, and faculty) may vary from institution to institution and among disciplines in the same institution. Satisfying faculty need may be, in any case, difficult to justify economically if one or both of the other needs are not evident.

Needs in public higher education may also be categorized as local, regional, or national. Local need refers both to the requirements of citizens who live within commuting distance of the campus and to the special characteristics of the community environment. Each university should develop programs in response to as many local educational needs as economically feasible. It must not try to meet all regional or state demands, however. To avoid unnecessary duplication of programs serving the region or the state, the responsibilities for meeting regional needs should be allocated among the several state universities by careful planning. Periodic review and evaluation of needs for existing academic programs should be conducted to determine whether a program should be continued, discontinued, or expanded, and when similar programs can be justified at another university in the System.

Some important national needs require curricula which may be very expensive and for which student demand in any single locality or region is minimal. Quite simply, meeting such national needs is the collective responsibility of all the universities in the United States. A single Ph.D. program in a certain field, for example, may be sufficient to serve the citizens of several states. Indeed, this fact is officially recognized by Florida's membership in the Southern Regional Education Board (SREB). It is incumbent upon all universities, even those of excellence, to capitalize on specific strengths that abide elsewhere. The State University System of Florida recognizes that it has a national obligation to contribute to the development of graduate programs, including those in highly specialized areas. The Florida Board of Regents must recommend policy decisions to determine the number of such graduate curricula which the State of Florida is not only willing but also financially able to support. The extent to which the State of Florida accepts its national obligation will become a matter to be resolved by the Board of Regents, the Legislature, and the people.

Recognizing that limited financial resources and expanding enrollments make it impossible for each university to offer quality degree programs in all disciplines and professions and at all levels, the Board of Regents is obliged to assess the societal, student, and faculty needs for every academic program. Accordingly, each university must be assigned the responsibility for offering certain curricula. Such assignment should take into account the goals of the State University System as well as the constraints of economics and need. The State University System, through its distinguished universities, will offer quality programs to satisfy the higher educational needs of the citizens of Florida to the extent that financial support is provided.

VII. Criteria for Adding Academic Programs[1]

A. *Undergraduate and Professional Programs*

Quantitative criteria for determining when a university should be authorized to offer new undergraduate or professional programs are difficult to develop. New programs may be considered in either of two ways: as unique or as similar to others offered in the state. On the one hand, if the program being considered for a university is not offered at any other university in the state, it must first be assessed on the basis of whether the need for it is local or statewide or whether the need exists now or is anticipated in the future. Determination must also be based on how many universities outside of Florida offer similar programs and whether these universities are accessible to Florida residents. Furthermore, policy decisions must account for the reasonable expectation that Florida residents will attend out-of-state universities in order to enroll in a given program, or that a sufficient number of students would enroll in such a program to make it economically justified if it were to be offered at a state university in Florida. The extent to which a contemplated program would require additional space, equipment, and faculty would have to be considered. The cost of the proposed program would also have to be compared to the cost of other needed programs in order to determine the priority which would be given to a projected program within the framework of available or anticipated appropriations from the Legis-

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[1] For the purpose of these criteria, a degree program is defined as a curriculum consisting of a planned sequence of courses and other educational experiences leading to a specific degree. A department or other academic administrative unit may be responsible for offering one or more degree programs such as the Department of Modern Languages with its separate curricula in each of several languages. Conversely, several departments may join together to administer one interdisciplinary degree program.

lature. On the other hand, if the undergraduate or professional program being proposed for a university is to duplicate a program offered at one or more of the state universities in Florida, an evaluation must be made about the extent to which these other programs are currently meeting statewide needs. The local demand and need for the proposed program must also be assessed. Answers must be obtained to such questions as how many of the anticipated local students would be able to attend other universities in the state where similar programs are available if the proposed program were not to be authorized? Would a sufficient number of students enroll in the proposed program to make it economically feasible? What impact would the initiation of the proposed program have on the enrollments in existing programs? The additional space, equipment, and faculty required must be considered, and the cost of the program must be compared to the cost of other needed programs. And finally, a determination must be made about the priority that would be given to implementation of the program within the framework of available and anticipated appropriations.

B. *Adding Graduate Programs*

No state university in Florida is restricted to undergraduate level programs; nor is any institution authorized to offer graduate programs in all disciplines. Before proposing that a graduate program be added to an undergraduate program in a discipline, a university must demonstrate (1) that there is a need for the program in the University System, (2) that the necessary faculty, space, library, and equipment will be allocated to the program, and (3) that the university's academic environment and available resources are such that high quality programs can be maintained. In other words, a university should not initiate a graduate program in a discipline until it has developed or stands prepared to develop the optimum critical mass. "Optimum critical mass" is supposedly reached when the university has acquired all of the necessary program ingredients in the right proportions to assure optimum interaction. The necessary ingredients include qualified faculty who represent competencies in related subspecialties, related departments, undergraduate and graduate students, space, equipment, and library materials. The task of quantifying "optimum" as numbers of faculty with related subspecialties, numbers of related departments, and numbers of students, is a most onerous one, and represents a new venture in higher education. There is very little in the literature which covers any kind of quantification that might serve as a guide to universities planning new graduate programs.

Most of the nine institutions which will exist in the State University System by 1972 will be relatively young and will be developing graduate programs simultaneously in order to meet the increasing statewide needs and demands. To provide guidance to these universities in their planning efforts, critical mass has been quantified and is expressed in the form of criteria which a university must be prepared to meet before it initiates a new graduate program. These criteria have been developed from studies of the growth and expansion of graduate programs at Florida State University, the University of Florida, and selected universities throughout the nation. The criteria were discussed with more than twenty-five graduate deans who represented a cross section of various types of graduate schools in the United States. The modifications and revisions suggested by these deans have been incorporated in the material which follows. A university's application to the Regents for the authorization of a new graduate program must contain a commitment that if authorization were to be granted, the university will meet the criteria prior to the start of the program. An institution's capability or willingness to meet the quantitative criteria does not guarantee automatic authorization of a proposed program. Other factors will be considered including local and regional needs for the program as well as costs and available resources.

1. Master's Degree Programs

In recent years, the master's degree has become almost as important to those seeking post-high school education as was the bachelor's degree about twenty-five years ago. This fact is evidenced by the number of master's degrees awarded in the United States in recent years — a number which, according to the Council of Graduate Schools of the United States, has increased rapidly and at a rate even faster than the increase in bachelor's degrees awarded.

Each of the state universities in Florida is eligible to apply for permission to offer a master's degree in any discipline for which it has been authorized to offer a bachelor's program.[1] The following criteria must be met prior to the submission to the Chancellor's office of a proposal for a master's program.

a. A minimum of fifteen bachelor's degrees in the discipline must be conferred during the year (June to June) prior to submission to the Chancellor's office of a proposal for the program, or a total of twenty-five bachelor's degrees during the previous two years, or a total of thirty bachelor's degrees during the previous three years. The latter represents an average of ten baccalaureates per year over a three-year period.

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[1] Proposed master's programs which are not based on an existing bachelor's level program are special cases and will be considered individually.

b. The proposing department must be prepared to allocate at least two of its FTE faculty positions per term specifically to teach master's level courses and to supervise master's level programs and research on the main campus. Assurance must be given that the two FTE positions will not be generated by the assignment of graduate teaching assistants to instructional duties, and that undergraduate instruction in the department will not suffer. These full time equivalent positions must be filled by permanent, experienced, and qualified faculty who hold either the doctorate or the highest academic degree appropriate to their respective areas of specialty.

c. The department must have at least three individuals each with a competence in a different subspecialty of the discipline concerned so that there will be available in the department competence in at least three different subspecialties. At least two of these people must have had experience in directing master's or doctoral dissertations.

d. The faculty must be competent, and the course content and curricula of the proposed master's program must be acceptable to the profession. One or more special consultants selected by the Vice Chancellor for Academic Affairs and approved by the appropriate faculty in the proposing university will evaluate faculty competency and the curriculum of the proposed program after the proposal has been submitted to the Chancellor's office.

e. Space, facilities, equipment, and library resources must be adequate. One or more special consultants selected by the Vice Chancellor for Academic Affairs and approved by appropriate faculty in the proposing university will evaluate the adequacy of space, facilities, equipment, and library resources after the proposal has been submitted to the Chancellor's office.

f. In the case of proposed interdisciplinary master's degree programs, the majority of the participating departments must be authorized to offer master's degrees. Each new interdisciplinary course that will be offered as part of such a program must be supported by at least a third of an FTE faculty position for each term that the course is offered.

2. Doctoral Degree Programs

Most of the doctoral programs now available in the

State University System are offered by two universities, namely, the University of Florida and Florida State University. A few Ph.D. programs have been authorized for the University of South Florida. Development and maintenance of high quality Ph.D. programs are very expensive, since the cost per student in almost all cases is much higher than for bachelor's or master's programs. Criteria must be developed, therefore, which will prevent the unwarranted duplication of such costly programs among the several state universities. One procedure for accomplishing this end would be to determine how many additional students might be accommodated in the existing doctoral programs at the University of Florida and Florida State University without additional facilities. A possible policy might then be adopted that no new doctoral curricula be authorized at any of the new institutions until the existing programs had reached their maximum enrollment capacities. Accurate projections of maximum enrollment capacities for existing doctoral programs, however, are extremely difficult to obtain since the factors upon which such projections are based are not stable. Indeed, if such a criterion[1] were to be adopted, newly established universities not only would have no sound basis for planning the development of doctoral programs on their respective campuses even though enrollments and justifiable needs in the regions served by these newer universities continued to increase, but might be indefinitely precluded from establishing doctoral programs. More reasonable criteria, it seems, would permit expansion to doctoral programs when certain advanced stages have been reached in a university's development. One such measure of a university's advanced development is a specifiable number of master's degrees conferred in each of a broad range of such subject disciplines as the natural sciences, the social sciences, and the humanities.

At Florida State University in 1967-68, for example, the ratio of the total number of master's degrees conferred collectively by all the departments in the natural sciences to the number of departments in the natural sciences authorized to offer doctoral degrees was approximately 15:1. Since this same pattern also held true for the natural science departments of the University of Florida, it seems a reasonable basis for a criterion which would entitle a recently established university to apply for one departmental doctoral program in the natural sciences for every 15 master's degrees conferred collectively by all of the natural science departments. If all of the natural science departments of a university collectively conferred a total of 30 master's degrees in a given year, therefore, that university would be entitled to apply for a doctoral program in each of two science departments. The university itself would select the two departments in which it wanted to develop doctoral programs. When the total number of master's degrees conferred in the natural sciences during a given year reached 45, moreover, the university could then request authority for a doctoral program in a third natural sciences department, and so on.

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[1] See criteria for discontinuing established programs, under *Evaluation of Authorized Graduate Programs*, p. 52.

Approximately the same ratio (15:1) also occurred in the humanities at Florida State University and the University of Florida, i.e., the ratio of the total number of master's degrees conferred collectively by all the departments in the humanities to the total number of departments in the humanities authorized to offer doctoral degrees was approximately 15:1. Approximately the same ratio also occurred for the social science departments at Florida State University and the University of Florida. Relating the number of master's degrees or equivalents produced collectively by a group of related departments during a given year to the number of departments in that group atuhorized to offer doctoral programs seems a reasonable criterion to be used by new universities in determining when consideration may be given to the development of doctoral programs. This same criterion can be used not only for natural sciences, humanities, and social sciences but also in such disciplines as business administration, education, and engineering. One advantage to using this kind of criterion is that universities can more effectively plan the development of doctoral programs since they have projections of future enrollments and are able to estimate the number of master's degrees that will be conferred in the various subject matter disciplines during each of the next five to ten years. Priorities and time schedules can thus be established which will determine when programs in the various disciplines will be ready to expand to doctoral level curricula.

Criteria for Doctoral Programs. — Two sets of criteria have been developed for doctoral programs. The first set is to be used by a university in determining how many of its departments are or may become eligible to have doctoral programs, and the second set is to be used in determining specifically which department or departments are or may become eligible to initiate doctoral programs. When these determinations have been made, the university will be able to establish its own priorities in terms of scheduling requests to the Board of Regents for authorization to begin doctoral programs in selected departments as the necessary financial support becomes available. Both sets of criteria are listed below.

a. Criteria for Determining the Number of Doctoral Programs

A group of departments[1] responsible for offering programs in related disciplines must have collectively produced during a given year (June to June) a minimum of fifteen resident[2] master's degrees, or master's equivalents,[3] for every department authorized or seeking authorization to offer a doctoral program. In other words, the ratio of the total number of resident master's degrees or equivalents produced collectively by all the departments in the group to the number of departments in that group actually authorized or requesting authorization for doctoral programs should be 15:1. If, for example, a group consists of ten departments, four of which are authorized to offer doctoral programs and one which is requesting authorization, the total number of resident master's degrees or equivalents which must have been produced by the ten departments during the year (June to June) prior to the submission to the Chancellor's office of the proposal for the doctoral program would be (4 + 1) X 15, or seventy-five. If two departments in the group are seeking authorization for a doctoral program, the number of master's degrees or equivalents which must have been produced would be (4 + 2) X 15, or ninety.

b. Criteria for Departmental Eligibility

The following criteria must be met prior to the submission to the Chancellor's office of a proposal for a doctoral program.

(1) A minimum of eight resident master's degrees, with theses, must have been conferred by the department during the year (June to June) prior to the submission to the

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[1] Departments may be grouped under such categories as the following: natural sciences, social sciences, humanities and fine arts, education, business administration, engineering, agriculture, home economics, library school, social welfare, and journalism and communication.

[2] "Resident" means on the main campus.

[3] A master's equivalent will be defined as an individual who is currently enrolled in a doctoral program and has completed fifty-one or more post-bachelor's credits acceptable toward the doctoral program.

Chancellor's office of the proposal for the doctoral program, or a total of thirteen with theses during the previous two calendar years, or a total of fifteen with theses during the previous three calendar years. The latter represents an average of five resident master's degrees with theses per year over a three-year period.[1]

(2) The proposing department must be prepared to allocate at least four of its FTE faculty positions per term specifically to teach and supervise master's and doctor's level programs on the main campus. Assurance must be given that the four FTE positions will not be generated by the assignment of graduate teaching assistants to instructional duties and that undergraduate instruction in the department will not suffer. These full time equivalent positions must be filled by permanent, experienced, and qualified faculty holding the doctorate or the highest academic degree appropriate to their respective areas of specialty.

(3) There must be in the department at least six individuals each representing competence in a different subspecialty in the discipline concerned so that there will be available in the department competence in at least six different subspecialties.

(4) The faculty must be competent and the course content and curriculum of the proposed doctoral program must be acceptable to the profession. Two or more special consultants selected by the Vice Chancellor for Academic Affairs and approved by appropriate faculty in the proposing university will evaluate faculty competency and the curriculum of the proposed program after the proposal has been submitted to the Chancellor's office.

(5) At least two related departments on the campus must be authorized to offer master's degrees as support areas

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[1] Requiring the department to have conferred a specified minimum number of resident master's degrees with theses during a designated time period prior to submission to the Chancellor's office of a proposed program will assure the existence of critical mass as it relates both to the number of graduate students enrolled in a specific departmental program and to the quality of the faculty in the department with regard to their collective experience in directing graduate theses. If the department has conferred the minimum number of resident master's degrees during the time period designated in the above criterion, but without theses, and the department does not have or wish to have a thesis requirement for the master's degree, faculty experience in directing theses may be demonstrated by compliance with the following alternative criterion: The permanent faculty of the department must have collectively directed to completion a minimum of 15 graduate theses (master's and/or doctoral) prior to the department's submission of a proposal for a doctoral program. The 15 theses must include those directed to completion by four or more permanent faculty members in the department, each of whom is five or more years away from retirement and each of whom has directed to completion two or more graduate theses (master's and/or doctoral).

for the doctoral program.

(6) Space, facilities, equipment, and library resources must be adequate. Two or more special consultants selected by the Vice Chancellor for Academic Affairs and approved by appropriate faculty in the proposing university will evaluate the adequacy of space, facilities, equipment, and library resources after the proposal has been submitted to the Chancellor's office.

(7) In the case of proposed interdisciplinary doctoral programs, the majority of the participating departments must be authorized to offer doctor's degrees. Each new interdisciplinary course that will be offered as part of the program must be supported by at least a third of an FTE faculty position for each term that the course is offered.

C. *Evaluation of Authorized Graduate Programs*

Evaluation of doctoral programs will be a continuing process that will occur at three-year intervals. The first evaluation will be made by applying the sense of the criteria used to determine the justification of the program in the first place. Every third year after the first evaluation period, the department will be expected to produce an average of two Ph.D.'s per year. The evaluation procedures will enable the Chancellor's office to examine such miscellaneous factors as the turnover in faculty, and the FTE faculty allocations to graduate work. Any deficiency must be justified at a hearing to be determined for such purposes. A year's probationary period will be imposed during which time the institution will be permitted to improve its program before its possible suspension or abolition.

Evaluation of master's programs may also be conducted from time to time to determine whether they continue to meet the objectives for which they were established.

VIII. Present and Projected Academic Programs in the State University System

Although the role and scope of individual institutions may vary considerably, some statewide needs and demands for curricula and degree programs in certain disciplines and professions, taken together with their relatively low cost and high productivity, justify offering them at every university, at least at the bachelor's level. On the one hand, such important and socially necessary undergraduate curricula occur in the arts and sciences, in business administration, and in teacher education, and are available at every state university in the State University System of Florida. All general purpose institutions thus contain programs in these basic academic and professional disciplines. On the other hand, there are some expensive undergraduate programs with a more limited student demand such as some various arcane area studies and multi-disciplinary institutes, which are assigned only to a limited number of institutions in the System. So too, are extensively developed graduate programs in specialized scientific disciplines like physics, biological sciences, chemistry, and engineering — all of which require large investments in expensive equipment — limited in development and assigned sparingly to a small number of institutions only after intensive planning and when justifiable need is obviously apparent. It is clear that these expensive programs and similar high-cost curricula require very rigorously controlled coordination on a systemwide basis in order to avoid the unnecessary duplication of expensive facilities within the public academic community of Florida. Such coordination is dealt with in Chapter IX but it is well to mention it as one of the rationales for planning the development of academic programs at all levels within the System. Under such a cooperative and coordinated approach, the various universities in the System should develop their individual strengths without duplication in order to serve the best educational interests of their regions, the state as a whole, and the nation.

Initially, each institution is authorized to offer undergraduate programs in those disciplines which have been assigned to it. When established criteria for initiating graduate degree programs have been attained by a given institution, however, it may also be authorized to expand its undergraduate offerings in selected disciplines to include curricula leading to the master's and doctor's degrees. These criteria (discussed in Chapter VII) together with the most recent enrollment projections available to the State University System, are two important bases for the observations which follow. In addition, professional societies have been consulted for advice about statewide educational needs, the faculties in the disciplines and the administrative staffs of individual institutions have been asked for guidance in determining their own strengths and their plans for future development, and, lastly, the judgment of the Board of Regents Academic Affairs staff has entered in order to clarify academic priorities in the necessary expansion and development of public higher education in Florida during the next decade.

In the following pages, present programs in the System are summarized briefly, and projections are included for programs that will be needed by 1980. As needs change, however, and as the future unfolds, the estimates and recommendations outlined here may well require revision. Indeed, it would be nothing short of miraculous if all the developments presented here were to occur exactly according to schedule, for the winds of change are strong in academe. Nevertheless, the following plans will allow for a flexibility and a response to changing educational needs within the state, and at the same time, will serve as a set of guidelines for the rational and economically justifiable expansion and modification of the academic portion of public education in Florida.

Agriculture. — The whole field of agricultural education is developing rapidly and changing significantly throughout the nation. Florida must accommodate such modification as seems appropriate to the needs and economic considerations of the state. In the State University System at the bachelor's level, a complete array of curricula in agriculture is available at the University of Florida, and a limited number of courses are offered at Florida Agricultural and Mechanical University. At the master's and doctoral levels, however, the University of Florida is now the only university in the System authorized to offer graduate programs in agriculture. In some special areas, coordinated programs between the University of Florida and Florida Agricultural and Mechanical University will be developed in order to insure the increased efficiency in the use of facilities. In the foreseeable future, however, it will not be necessary to expand offerings in agriculture to any other universities in the State University System. The existing programs at the two universities should be modified and closely coordinated in order to meet modern emphases in the teaching of agriculture at universities as these concepts evolve nationwide and statewide. Indeed, some specialized, low-productivity programs in agriculture at both universities may be eliminated or reduced greatly by 1980.

Allied Health Sciences. — Except for bachelor's degree programs in medical technology, which are now offered by the biology departments of several institutions in the State University System, only the University of Florida is currently authorized to provide degree programs in such allied health science disciplines as occupational therapy, physical therapy, and rehabilitation counseling. By 1975, both the University of South Florida and Florida Technological University will need to offer degree programs in some selected allied health science disciplines, often in cooperation with local health facilities and organizations so that the expense to the state and university of maintaining costly clinical investments will be minimal. Additional programs in these fields will be needed at the Miami university shortly after its opening in 1972.

Architecture. — Bachelor's and master's level programs for the training of professional architects are presently offered only at the University of Florida. Between 1975 and 1980, however, a second university will need to initiate bachelor's and master's level programs in this field. No university in Florida is currently authorized to offer a doctoral program in architecture, and because the highest recognized professional degree in the field is the master's, no doctoral program is contemplated in the foreseeable future.

Area Studies. — Area Studies are crucial interdisciplinary efforts by institutions within the State University System to bring together under some given geographical heading such various disciplines as economics, geography, history, literature, linguistics, political science, and sociology. At the present time, the State University System has programs at the undergraduate and graduate level in African studies, Asian and East Asian studies, Russian area studies, Inter-American and Latin American studies, and

American studies. *African studies* are now confined to the University of Florida and in the future should be so confined. By 1980, the University of Florida will need to expand its bachelor's and master's programs in African studies to a doctoral program. Undergraduate programs in *Asian studies*, or Non-Western studies, are currently available at three universities — Florida State University, the University of Florida, and the University of South Florida. By 1975, two institutions will need to offer programs in Asian studies at the master's level, and by 1980 the initiation of one doctoral program should be sufficient for the System. *Russian area studies*, or Slavic and East European area studies,are available at the University of Florida at the undergraduate level, and at Florida State University at both the undergraduate and master's levels. By 1975, the University of Florida will need to offer a master's program in this area, and by 1980, two more institutions will need to give at least master's level work in either Russian or East European area studies. By 1980, also, one university will need to offer a doctoral program in this area. Inter-American studies, which include Latin American area programs, are presently offered at the bachelor's level at four universities — the University of Florida, Florida State University, the University of South Florida, and the University of West Florida — and at the master's level at both the University of Florida and Florida State University. Also, at the University of Florida, a Certificate in Latin American Studies is awarded in conjunction with Ph.D. degrees granted by participating departments. Because of the close proximity of Florida to Latin America and its present broad concern with Latin American intellectual, political, social, and economic relations, the State University System of Florida should become a national leader in this academic field. By 1980, therefore, at least five universities in the System should be offering master's level work in this area; and by 1980, doctoral programs will be needed in Latin American and Inter-American studies at the University of Florida, Florida State University, and the new state institution in Miami. *American studies* (including Afro-American studies) are presently part of the undergraduate curricula of four universities in the System, namely, Florida State University, the University of Florida, the University of South Florida, and Florida Agricultural and Mechanical University. A master's degree in American studies is offered at Florida State University. Further master's level work will need to be offered at the University of Florida by 1975, and at the University of South Florida by 1980. Although no doctoral programs in American studies are available at the present time, two universities will need to initiate doctoral programs in this area by 1980.

Art— All of the universities in the System now have undergraduate programs in art available. Master's programs in professional art, however, are currently offered at only three institutions, namely, the University of Florida, Florida State University, and the University of South Florida. By 1975, there will be a need for a master's level program at a fourth institution, and by 1980, at a fifth institution. Although no university is now authorized to offer a doctoral program in art, by 1975, a doctoral program in art history will be initiated at Florida State University. This one doctoral program in art history in the University System will be sufficient at least through 1980.

Biological Sciences. — Seven of the state universities now offer undergraduate degree programs in the biological sciences, and when two new universities are opened in 1972, all nine state institutions will offer undergraduate level programs in this area. Five universities now have masters programs in various disciplines of the biological sciences. By 1975, it will be necessary for eight of the nine institutions to offer master's level programs. Doctoral programs in selected disciplines in the biological sciences are now available at three state universities. A doctoral program will be needed at a fourth university by 1975, and during the following five years, moreover, six of the nine universities will need to offer doctoral programs in selected biological sciences.

Business Administration and Special Degree Programs in Administration. — Programs in business administration at the undergraduate level are now offered at all seven state universities. When the two new universities are opened in 1972, all nine state institutions will offer undergraduate level programs in this area. Six universities presently have master's level programs in selected business administration disciplines. Eight institutions will need to offer master's level programs in selected business administration disciplines by 1975. Doctoral programs in business administration are presently available at only two state institutions. By 1975, there will be a need for three universities to offer doctoral programs, and during the five years which follow, doctoral programs will be needed at seven universities.

Within the State University System, there are curricula leading to degrees in such administrative specialties as hospital administration, hotel and restaurant administration, penal administration, and law enforcement administration. Although it appears unlikely that the state will need many additional specialized programs at other universities, some will be required. Florida State University offers the only hotel and restaurant administration degree program now available in the state, and by 1975, the new state institution in Miami will need to offer a program of this type. Florida Atlantic University currently has the state's only degree program in law enforcement administration. By 1975, similar programs will be necessary at the University of South Florida and at the new Miami institution.

Dentistry— There is presently no dental school in the State of Florida. Plans are underway to begin a dental school at the University of Florida by 1972. No additional dental schools will need to be established in Florida at least through 1980. Undergraduate level programs for dental hygienists and perhaps dental assistants may be needed by 1975 and certainly by 1980. Such programs are generally most successfully conducted by, and as an integral part of, dental schools.

Education. — All of the seven state universities now offer programs in teacher education at the bachelor's and master's level and, when two new universities are opened in 1972, all nine will offer bachelor's and master's level programs in various education disciplines. Doctoral programs in selected education disciplines are now available at four state universities. By 1975, six universities will offer doctoral programs; and by 1980, doctoral programs will be required at eight institutions.

Laboratory schools, which function in Colleges of Education to serve in developmental testing of experimental teaching methods, are presently operated by four universities in the System. Role and function cost studies are underway to determine the feasibility of such schools, and until the results of these studies are forthcoming, no additional laboratory schools will be authorized. Cooperative ventures, however, between universities and local school boards will be evaluated as individual cases, but in the foreseeable future, no further university development of laboratory schools will be undertaken.

Engineering (excluding Engineering Science and Ocean Engineering). — At the bachelor's level, programs in various selected engineering curricula are available at four universities, namely, the University of Florida, the University of South Florida, Florida Technological University, and Florida Atlantic University. Master's programs are available at two universities, namely, the University of Florida and the University of South Florida. By 1975, an additional master's level program will be needed at Florida Technological University, and by 1980, at a fourth university. Although the University of Florida is the only institution currently authorized to offer doctoral programs in engineering, by 1975 a doctoral program may be needed at a second university.

Engineering Science. — Programs in engineering science at the bachelor's and master's level are now available only at the University of Florida and at Florida State University. A doctoral program in engineering science is authorized only at the latter institution. No additional programs in engineering science will be required at any other university at least through 1980.

Forestry. — Curricula in forestry at all levels, bachelor's, master's, and doctoral, are authorized only at the University of Florida. There is no indication that, in the foreseeable future, any other university should offer curricula in this area.

Home Economics. — Curricula in most home economics disciplines and at all levels (bachelor's, master's, and doctorate) are available at Florida State University. Curricula in selected home economics disciplines at the undergraduate level are also available at Florida Agricultural and Mechanical University. Some coordinated and cooperative arrangements are anticipated in the mutual development of home economics education, but these two curricula will be sufficient. No other state universities will develop complete home economics programs in the foreseeable future. However, in order to meet the growing need for nutritionists, there may be a need to develop such specialized programs at other institutions.

Humanities (excluding Art, Music, and Theatre Arts). — At present, undergraduate programs in various humanities curricula are offered at all seven state universities. When two new universities are opened in 1972, all nine institutions will offer undergraduate programs in humanities. Five universities now offer master's level work in one or more humanities disciplines. Most of the nine state universities will need to offer master's level programs in one or more selected humanities disciplines by 1975. Only two universities now offer doctoral level programs in any of the humanities disciplines. By 1975, three universities will be required to offer doctoral programs in selected disciplines in the humanities; and by 1980, doctoral programs in one or more humanities disciplines will be needed in four universities.

Journalism and Communication.— Several of the universities currently offer undergraduate programs in journalism and communications. By 1975, all state universities will need to offer undergraduate level programs in journalism with news writing emphases. However, undergraduate programs in other areas of communications which require expensive facilities, as for example broadcasting, will by 1975 be needed at only three universities and by 1980 at a fourth institution. Master's degree programs in journalism and communications are offered only at the University of Florida. Two more universities, probably Florida State University and the University of South Florida, will need to offer a master's degree program in these fields by 1975; and by 1980, master's degree programs will be needed at yet two more universities. At the present time, no university in Florida has a doctoral program in journalism and communications. Although there will be a need for the University of Florida to offer a doctoral program in this field by 1975, this one program will be sufficient at least through 1980.

Law — Presently, degree programs in law are available at the University of Florida and at Florida State University. These two law degree programs will be sufficient for the State University System at least through 1980.

Library Science.— Although bachelor's degree programs with majors in library science are not available at any state university, a limited number of library science courses at the undergraduate level may be taken as a minor area of concentration at most institutions. At the master's level, only Florida State University offers a degree program in library science. This program is available to students in other states of the region through cooperative arrangements with the Southern Regional Education Board. By 1975, a second master's level program will be needed at the University of South Florida. Master's programs in this field will be necessary in yet two more universities by 1980. Florida State University is now authorized to offer a doctoral program in library science; this one program is sufficient for the needs of the University System at least through 1980.

Medicine (Human). — The University of Florida is now the only university in this System which has a medical school to prepare doctors of medicine. In addition, the medical school of the University of Miami is partially subsidized by the State of Florida and must be considered in any discussion of future needs. Plans are currently underway to initiate another medical school at the University of South Florida immediately. Until at least 1980, there will be no need for any additional state-supported clinical facilities. The philosophy of medical education, however, is undergoing change which will have bearing on future facilities requirements. Those universities within the System that have strong and well developed graduate programs and that have awarded doctoral degrees in physical (chemistry, at least), biological, and social (sociology and psychology) sciences may develop specialized courses which will prepare students to transfer to any of the clinical centers in the state in order to complete the requirements for the doctor of medicine degree in no more than three years.

Medicine (Veterinary). — The State University System now has no veterinary medical program, although courses in veterinary science are offered at the University of Florida's College of Agriculture. Approximately 100 Florida undergraduates who wish to study to become veterinarians are currently educated in state universities in Alabama and elsewhere in the South through arrangements with the Southern Regional Education Board. Until at least 1975, present arrangements for veterinary training should be sufficient. The 1969 Legislative Session appropriated planning funds for the establishment of a school of veterinary medicine at the University of Florida. The Board of Regents is now engaged in the planning necessary for such a program to become operative by 1975.

Music. — Bachelor's programs in music as an option in the liberal arts now exist in all the universities in the System and will be authorized for the two new state universities when they open. Bachelor's programs in music education aimed at training public school teachers for music are also available throughout the System. The programs in professional music training, however, are limited. Master's degrees in professional music are currently offered only at Florida State University and at the University of South Florida. By 1975, though, a professional master's degree program will be needed at the University of Florida, and by 1980, at a fourth institution. Only Florida State University is now authorized to offer a doctoral program in music, and no additional doctoral programs in music will be needed in the University System, at least through 1980.

Nursing— Undergraduate degree programs in nursing are currently offered at three universities — the University of Florida, Florida State University, and Florida Agricultural and Mechanical University. A fourth university, the University of South Florida, has been authorized to start a program in 1970. The didactic and clinical portions of nursing education are frequently separable. Current trends are toward a closer association between nurses' clinical training and those of the other health sciences. The three clinical centers of the state (Gainesville, Tampa, and Miami), together with their closely affiliated hospitals and clinics, should be adequate until at least 1980. Master's level programs in selected nursing disciplines are available at the University of Florida and at Florida State University. An additional program should be initiated at the University of South Florida by 1975 or shortly thereafter.

Oceanography — Oceanography is an interdisciplinary field of science involving the application to the marine environment of all phases of such basic sciences as physics, meteorology, chemistry, geology, mathematics, biology, and psychology. In addition to the basic sciences, many other disciplines may be included, such as engineering, international and coastal maritime law, and history.

All state universities in Florida are encouraged to use the marine environment in teaching basic sciences at the bachelor's level. Marine aspects of such disciplines as biology, chemistry, physics, and geology may be included in the curricula of existing authorized undergraduate and graduate degree programs. Florida State University is the only institution in the System, however, presently authorized to offer master's and doctoral programs in oceanography. The University of South Florida is authorized to offer a master's degree in marine science. By 1975, there will be a need for an additional institution to initiate a master's level program in either oceanography or marine science, and for a second institution to initiate a doctoral level program in this field. By 1980, a third doctoral program will be required.

Because of the expensive nature of quality programs in oceanography sciences research and because of the shortage of trained personnel to conduct such programs, the Board of Regents has established, as part of the Chancellor's office, a coordinating agency — the Florida Institute of Oceanography.

Ocean Engineering. — At the bachelor's level, only Florida Atlantic University now has a program in ocean engineering, and it should continue to be the only institution in the System with an undergraduate program in this area. At the master's level, the University of Florida has a program in coastal and oceanographic engineering. A master's level program in ocean engineering may be needed at Florida Atlantic University by 1975.

Pharmacy— The education of pharmacists is currently undergoing examination by the profession. Two trends seem evident at this time: the education of the small business entrepreneur engaged in retail operations, and the training of the pharmaceutical researcher whose career will be more appropriate to discovery in the laboratory and application on a large scale as part of the health team research effort. The foreseeable developments of pharmacy education would seem to suggest that separate emphasis be placed upon the two differing philosophies — the practical pharmacy owner and the pharmacist as part of the team necessary for ongoing medical and health research. Curricula in pharmacy are now available at two universities, namely, the University of Florida and Florida

Agricultural and Mechanical University. Although there is a shortage of pharmacists in the state, enrollments in these two existing pharmacy programs are relatively small, and additional students can be accommodated in each of them. Increased enrollments are foreseen under the predominantly existing educational concept devoted to training the pharmacy owner. By 1980, it may be necessary to expand the existing programs, but another pharmacy curriculum of this kind will not be needed at a third university in the System. Since the whole discipline is under examination, there may be a change in philosophy or purpose as the pharmacist becomes more closely identified with the health research team. Additional programs may have to be developed to accommodate such a change in role and the redefinition of the needed training of the pharmaceutical research specialist.

Physical Sciences and Mathematics. — Seven state universities now offer undergraduate programs in the physical science disciplines and in mathematics and, when two new state universities are opened in 1972, all of the nine state institutions will offer undergraduate level programs in some physical science disciplines and in mathematics. Four institutions are presently authorized to offer master's level programs in the physical science disciplines and in mathematics. By 1975,eight institutions will need to offer master's level programs in these areas. Doctoral programs in selected specialties in the physical sciences and in mathematics are now available at the University of Florida and at Florida State University. By 1975, four of the nine universities will need to offer doctoral programs in these disciplines. Six universities will offer doctoral programs in selected physical science and mathematics disciplines by 1980.

Because of the inherently costly nature of extensive programs in the "hard" sciences, graduate programs in these disciplines at the several state universities must be coordinated on a systemwide basis in order to avoid the unnecessary duplication of expensive technical facilities. Complete programs in all subspecialties in the physical sciences cannot be supported at every university. Therefore, each university must be encouraged to cooperate in the use of facilities and in the coordinated development of programs on a statewide basis. Thus, although all scientific specialties will not be available on any one campus, a wide variety will be available systemwide. Under this arrangement, the state universities would be able to cooperate in providing faculty and facilities for inter-institutional use where students from all the institutions could obtain appropriate professional experience necessary for the completion of advanced degree programs.

Social Sciences (excluding Social Work). — Undergraduate programs in various social sciences curricula are presently offered at all seven state universities. In 1972, when two new universities are opened, all nine institutions will offer undergraduate programs in the social sciences. At the present time, four universities offer master's level work in one or more social science disciplines. By 1975, eight universities will need to offer master's level programs in one or more selected social science disciplines. Only two universities now offer doctoral level programs in any of the social science disciplines. Four universities will need to offer doctoral programs in selected social science disciplines by 1975, and doctoral programs for one or more social disciplines will be necessary in eight universities by 1980.

Social Work and Social Welfare. — Only Florida State University now offers a professional degree program in social welfare at the bachelor's level. Concentrations in social welfare, however, are available as subspecialties in undergraduate programs in sociology at three other state universities. Within the next decade, all state universities should provide for concentrations or programs in social welfare at the undergraduate level. Such programs should have a high liberal arts component but be directed toward pre-professional practice. The only professional master's level program in social work in the University System is currently offered at Florida State University. As Florida develops during the next decade, there will be an increasing need for persons trained in all aspects of this broad area. The increasing urbanization of the state makes it mandatory that the University System confront the social needs of its poor and disadvantaged citizenry. As the professionalization of this field increases, moreover, modifications and accommodations to changing conditions will occur that will alter significantly the present training in this field. By 1975 and through 1980, three additional universities should be authorized to offer master's level work. At the present time, there are no professional doctoral programs in social work or social welfare available in the University System. A doctoral program at Florida State University will be needed by 1975 and will be sufficient for Florida at least through 1980. Such a program should be directed at the production of high level researchers and university and junior college faculty.

Technology. — Engineering programs offered by major universities have followed a national trend during the past 20 years by becoming less applied and more theoretically and research oriented. As a result, the industrial community now lacks people with university-level training in technology similar to that provided by many engineering schools prior to 1945. Although the community colleges have attempted to fill this void by offering two-year terminal programs in various fields of technology, and junior college graduates of these programs have, to some extent, filled the demand for technicians, there still exists a need for technology graduates with the baccalaureate degree whose programs of study include the normal general education and liberal arts requirements, but also are more applied and less research oriented than the degree programs of most modern engineering schools. Examples of technology degree programs required by industry and the professions are those in engineering and computer technology.

At the present time, Florida Agricultural and Mechanical University, the University of South Florida, and Florida Atlantic University are authorized to offer a degree program in technology. By 1975, undergraduate degree programs in selected areas of technology will be needed at three additional universities in the System. Curricula for such degree programs must be developed in cooperation with junior colleges which offer terminal two-year technology programs leading to the Associate of Science degree. State universities will only be authorized to initiate programs of this kind, however, when criteria and standards have been developed on individual campuses to determine which junior college technology credits are transferrable for upper division work and what liberal arts courses are either to be validated by the university as acceptable from the junior college or required as part of the university degree requirements in technology. In short, the establishment of technology programs at the universities does not preclude the necessity for a strong liberal arts component in a university education and degree.

Theatre Arts. — Undergraduate curricula in drama are presently available at all seven state universities and will also be available at the new universities in Miami and Jacksonville when they open in 1972. Only two universities, namely, Florida State University and the University of Florida, now offer master's level programs in this field, however. By 1975, master's level programs will be needed at two additional universities; and during the following five years, two more programs may be needed at the master's level, making a maximum of six in the University System by 1980. These programs should be authorized primarily at universities located in metropolitan areas where the size of the population will be able to support a theatre in a university setting without overly extensive investment on the part of the state in expensive facilities. Since two doctoral programs in drama are now available in the System — at Florida State University and the University of Florida — they should be sufficient at least through 1980.

The development of graduate programs in the performing arts at the several state universities must be coordinated on a systemwide basis to avoid unnecessary duplication of expensive performing arts facilities. Study should be undertaken on the development of a state center for the performing arts in a highly populated, easily accessible location in Florida where the local citizenry has strong interest in supporting various cultural and fine arts activities, including theatre. Under this arrangement, the state universities would be able to cooperate in providing faculty for the center where students from all the institutions could obtain appropriate professional experience necessary for completion of advanced degree programs in theatre.

Urban Studies. — Solving the complex problems of the modern urban community requires the cooperative efforts of specialists in such various academic disciplines as social and behavioral sciences, natural sciences, education, and business. Because urban studies are inter-disciplinary and involve faculty of many departments in each institution, a statewide plan of coordination must be developed which will utilize the diversity of expertise found on the campuses of the System to avoid unnecessary overlapping and to encourage faculty having common research interests in urban activities to work cooperatively on appropriate related problems. Each of our institutions has faculty engaged in various types of urban research, and it is planned that many of the faculty research specialties in the new Miami university, which opens in 1972, will be urban-oriented. In order to meet the growing demand for skilled community workers in areas as the Community Action Programs of the Office of Economic Opportunity, Model Cities, Volunteers In Service of America, etc., there will be a need for further development of programs in Community Sciences and Services at several of the state universities. Only Florida State University currently offers a graduate degree program in this field — a master's degree in urban and regional planning. It is quite clear that by 1980 a doctoral program in urban studies will be needed at the new university in Miami and it should build its staff, curriculum, and library facilities to undertake such a program. It is possible that another doctoral level program will be needed in the System with its primary focus upon state and regional analysis and planning.

IX. Interinstitutional Coordination and Cooperation

Coordination and cooperation in the planning and development of academic programs are both essential elements in a large and expanding system of higher education. Only through effective coordination is it possible to eliminate irrational and wasteful duplication of programs in the University System. Coordination also allows for the reasonable development of necessary duplication of broad undergraduate and graduate programs. The University System has been successful thus far in avoiding unnecessary duplication of programs. One area that requires greater coordinated effort on the part of all the universities, however, is the development of more cooperative teaching and research programs in disciplines requiring faculty, facilities, or library resources beyond what can reasonably be allocated to a single institution.

Universities might engage in many kinds of cooperative ventures. Special equipment and facilities located on only one or two campuses could be shared by interested faculty from the other institutions — such facilities, for example, as large computers and expensive ETV production studios. These may be used cooperatively by several universities on a time-sharing basis. Large oceanographic research vessels, moreover, would be economically impossible for a single university to obtain or maintain. Cooperation in these areas, though, is possible only when properly planned coordination among faculties of several universities precedes the acquisition of such costly facilities. Universities that offer only undergraduate work in particular disciplines could coordinate their programs with those universities offering graduate work in the same disciplines. Thus it would be easier for students to move within the System. Faculty members from the several universities who have similar research interests in highly specialized disciplines should be encouraged to cooperate in common interdisciplinary research projects in such fields as urban studies and oceanography. In this way they would bring their collective abilities to bear upon the solution of selected problems. Universities could also cooperate with each other by sharing faculties in highly specialized disciplines. Cooperative degree programs might be developed in which a student could enroll in a curriculum planned by two or more universities, could take courses in each of them, and could be awarded a degree by one of them upon completion of the program. Such an arrangement would work well in cases where two or more universities individually have neither the faculty nor the resources to offer a particular program. Opportunities should also be arranged for students in selected programs to enroll in sister state institutions for one or two terms in order to study under the supervision of a particular faculty person or to take advantage of a special facility. These kinds of cooperative ventures are particularly relevant and possible in the present case of Florida Agricultural and Mechanical University and Florida State University, both located in Tallahassee.

One example of a cooperative project which now exists in the State University System is the university study center in Florence, Italy, an international program consisting of a regularly scheduled series of humanities courses offered in Europe. It is open to approximately 100 undergraduate sophomore, junior, and senior students enrolled in the seven institutions in the State University System. Most of the courses are taught by Florida State University professors in Italy, and the program is administered by Florida State University on behalf of the State University System. Credits, moreover, are transferable to any other institution in the System. Another example of coordination at the state level is the Honduras program, an experiment in international education which began in July 1968 when the State University System signed a contract for $1,128,000 with the Republic of Honduras through the United States Agency for International Development. The express purpose of the program is to use the expertise within the State University System to reorganize secondary school education in Honduras. The University of South Florida has been selected to administer this international contract, but the program is systemwide with at least three universities participating.

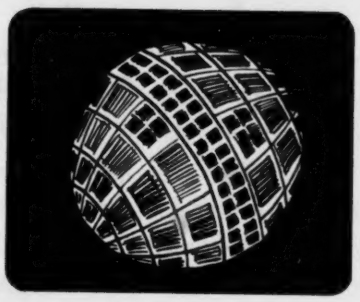
The Florida Board of Regents is responsbile for coordinating and governing the institutions in the State University System. Coordination is facilitated by the fact that the Board approves all proposed academic programs as well as institutional operating and capital budgets. The Chancellor and his staff carry out the administrative and coordinating functions within the framework of policies established by the Board, including the review of proposed academic programs, institutional budgets, and construction plans.

Academic programs in the State University System of Florida are coordinated by academic specialists under the supervision of the Vice Chancellor for Academic Affairs. These specialists are competent in various disciplines and work with faculty counterparts at the several universities to effect coordination and to help plan cooperative programs. Permanent and *ad hoc* interinstitutional faculty committees are also appointed to deliberate on ways to coordinate programs in such selected disciplines as oceanography, teacher education, engineering, social work, and international programs. Because of the efforts of the coordinating staff of the Chancellor's office and of these interinstitutional councils and committees — e.g., the Council of Presidents and the Council of Academic Vice Presidents — formal and informal communication between the universities about what is happening on all the campuses in the System takes place. Such communication is a necessary prerequisite to the development of a coordinated system of higher education.

One important council has recently been formed — the Council for Junior College Affairs. The membership will consist of one person from each institution, and the Council will insure coordination of university and junior college activities with particular emphasis upon the academic interface. Two of the universities in the system now admit principally graduates of the public junior colleges, and the number will increase to four when the new universities open in 1972. In addition, a growing percentage of the upper division student body of the four-year institutions consist of junior college transfers. In order that the educational processes be regarded as a continuum and that the disruption of the student's academic progress be minimized, coordination of the efforts by the universities and the junior colleges is essential. It will be necessary, therefore, that the Council coordinate its work closely with the Council of Academic Vice Presidents.

Finally, in addition to the coordination of academic and developmental affairs, the Chancellor's office maintains a formalized structure of interinstitutional councils and committees which function in the crucial area of administrative and fiscal matters. Finance and accounting, purchasing, personnel, and budget are among the spheres of interest covered by these special committees. Policy and procedural matters are generally reviewed by an interinstitutional study group, not only as an effective method of attaining and maintaining institutional perspectives, but also as a means of providing guidelines in significant matters of fiscal management throughout the State University System. Such close control and supervision regularizes and standardizes policies directly concerned with public funds and their most productive educational uses.

In short, through effective coordination and cooperation, the several state institutions can make the most productive use of the resources available for public higher education in the State of Florida and can develop a clear interrelatedness of purposes, functions, and goals which will not only enhance the educational productivity of the individual institution but will also lead to the larger goal of creating a truly distinguished complex of unique institutions of higher learning — institutions second to none in public education in the United States.



X. Continuing Education

Higher educational institutions in the United States have had a long and rich history of off-campus extension activities. During the last few years, however, universities have emphasized more substantially their continuing education role in modern society. The reason for this increased attention to the university's continuing education activities is well explained in the April-May, 1968, issue of *The Spectator*, a publication of the National University Extension Association.

> The complex of relations between the community and the university have multiplied in proportion to the expansion of knowledge. There was a time when knowledge accumulated slowly, when cultural lag posed no crisis, when a man could work and live throughout his maturity as he learned to do while young. Today, we must live with the fact that as much knowledge has been discovered in the past decade as in the entire previous history of man. In technology, the time-span between discovery and application now is critically short, and personal obsolescence in terms of education and training is shockingly rapid. Accelerating social change is producing new problems and aggravating old ones. We are confronted with new urgencies by the problems of the knowledge explosion, the urbanization of our society, the growth of population, the diminution of natural resources, and the changes in technological and socio-political-economic relationships affecting individuals, institutions, and the social order.
>
> These new realities have profound meaning for university extension, because the public service performance of the university is shaped by deeper and more critical involvement of the institution in the community and by increasing reliance of the community on the university.[1]

Colleges and universities throughout the country have accepted the challenge of these increasingly complex factors. They have attempted to provide credit course offerings, noncredit short courses, symposiums, seminars, independent and correspondence study, and community involvement — in short, a dimension of lifelong learning for our rapidly increasing adult population. The 1967-68 statistical summary released jointly by the Association for University Evening Colleges and the National University Extension Association showed that the member institutions in those two organizations registered 4,412,390 persons in their continuing education activities during the 1967-68 year. This total clearly depicts the increasingly significant role afforded to continuing education in the total national program of higher education.

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[1] "College and University Extension: NUEA Position Paper," *The NUEA Spectator*, Vol. XXXIII, No. 4, April-May 1968, pp. 5-6.

The State University System of Florida, which initiated its continuing education program in 1919 at the University of Florida, has long recognized that continuing education is one of its primary functions. The System's existing universities, together with the two new institutions, will cooperatively and in a coordinated fashion attempt to meet the continuing education needs of the adult population of the State of Florida. The State University System's continuing education program, as it was restructured by the Florida Board of Regents in 1965, provides courses for credit off-campus and often at night, which lead to undergraduate, graduate, and professional degrees for adults who are not able to attend fulltime, daytime campus programs. Opportunities for structured educational experiences are also provided for individuals who wish to continue their vocational and professional education beyond and apart from their degrees, in noncredit activities, and independent study. In addition, noncredit seminars, short courses, and symposiums are conducted for the benefit of the general adult population, and thus contribute to their development as individuals and citizens.

Assistance and support are also provided to communities and community institutions and agencies who are working toward the solution of their local, regional, national, and international problems. Examples of community service projects in which the state universities are engaged are Title I of the Higher Education Act of 1965 (Community Service and Continuing Education); Model Cities; Florida Regional Medical Program; Education Professions Development Act; A.I.D. — Technical Assistance to Honduras; and the State Technical Services Act.

Present and Projected Continuing Education Enrollments in the University System. — Credit course activities in the State University System of Florida for 1966-68 registered a total of 43,527 students. Projections (Table 4) show that off-campus credit course registrations will increase to some 141,686 registrations by 1978-80. Current and projected growth can be traced directly to the increased emphasis which professionals place on returning for the new knowledge available in their various fields. Historically, the largest percentage of continuing education credit course enrollments has been in teacher education (60 to 80 per cent). Teacher education courses should constitute 70 per cent or more of the off-campus credit course population for the State University System during the period 1969-1980.

The 1966-68 biennium saw 98,870 people involved in 819 conference activities. The projected noncredit activity (Table 5) shows 174,428 registrations for the 1978-80 biennium. The projections for credit and noncredit enrollments in Tables 4 and 5 are predicated on the assumptions that the demands for continuing education services by teachers, business, industry, and communities will continue to increase at least at the same rate as they have during the last five years; that there will be a marked increase in continuing education services in areas where new state universities are established; and that appropriate financial support will be forthcoming from state and federal governments.

The State University System of Florida's continuing education program is organized in a pattern of decentralized administration with centralized accountability. Each of Florida's seven state universities is responsible for servicing a determined geographic region of the state and may offer, within its region and without prior approval from the University System's Continuing Education office, any credit courses which have been approved by the university for on-campus instruction. A university may also offer credit courses outside of its region after appropriate clearance with the University System's Office for Continuing Education. Universities which have capabilities in specialized or unique areas not available in any other state university may, with the permission of the University System Office for Continuing Education, offer their course(s) in any part of the state. An official listing of its specialized or unique courses and programs is normally prepared for each university at the beginning of every academic year. A university has complete operational autonomy for its noncredit short courses, seminars, and symposiums. No prior approval is needed for these activities, although universities are asked to report all such activity, in advance, to the University System Office for Continuing Education.

TABLE 4
STATE UNIVERSITY SYSTEM
OFF-CAMPUS CREDIT ENROLLMENT PROJECTIONS
1968–1980

Institution	Actual Enrollment 1966–68	Projected Enrollment 1968–70	1970–72	1972–74	1974–76	1976–78	1978–1980
University of Florida	9,507	11,029	12,151	7,530	7,830	8,141	9,779
Florida State University	11,339	14,129	15,570	17,158	18,912	20,846	22,981
Florida A & M University	1,880	2,732	3,009	2,947	3,064	3,185	3,312
University of South Florida	13,497	14,722	16,227	17,886	19,715	21,731	23,971
Florida Atlantic University	7,662	8,390	9,355	9,866	10,257	10,661	11,240
University of West Florida	1,956	3,763	4,147	4,571	5,038	5,553	6,121
Florida Technological University	–	2,923	3,219	3,546	3,904	4,300	4,737
Florida International University	–	–	–	9,040	21,200	33,499	45,720
University of North Florida	–	–	–	3,105	5,685	8,970	13,830
TOTALS	**45,831**	**57,788**	**63,678**	**75,649**	**95,605**	**116,787**	**141,686**

Compiled by the Florida Board of Regents, Office for Academic Affairs, 2/11/69

TABLE 5

STATE UNIVERSITY SYSTEM NONCREDIT ENROLLMENT PROJECTIONS

1968–1980

	Actual Enrollment	Projected Enrollment					
Institution	**1966–68**	**1968–70**	**1970–72**	**1972–74**	**1974–76**	**1976–78**	**1978–80**
University of Florida	11,717	12,889	14,178	15,596	17,156	18,872	20,759
Florida State University	53,748	56,435	59,256	62,218	65,330	68,596	72,025
Florida A & M University	3,878	4,071	4,274	4,487	4,711	4,946	5,193
University of South Florida	24,743	27,217	29,938	32,932	36,225	39,848	43,843
University of West Florida	857	1.028	1,233	1,479	1,775	2,130	2,556
Florida Atlantic University	3,927	4,320	4,752	5,227	5,750	6,325	6,958
Florida Technological University	–	1,000	1,400	1,960	2,744	3,842	5,379
Florida International University	–	–	700	1,400	2,800	5,600	11,200
University of North Florida	–	–	500	950	1,805	3,429	6,515
TOTALS	**98,870**	**106,960**	**116,231**	**126,249**	**138,296**	**153,588**	**174,428**

Compiled by the Florida Board of Regents, Office for Academic Affairs, 2/11/69

The University System Director for Continuing Education and the Chancellor's staff concern themselves with central planning and coordination of the statewide program. Supervisory assistance is given to the continuing education divisions of each of the state universities in order to insure that the justified needs of the state are being met, and that there is no unnecessary duplication on the part of several universities. The programs are evaluated to determine whether they are being conducted within the framework of established policies, whether off-campus programs are consistent in quality with on-campus programs, and whether the universities are making maximum use of resources available for continuing education programs.

In carrying out these goals and objectives, moreover, the University System takes into account courses and programs offered by the private colleges and universities within the State of Florida and attempts in every way possible to avoid duplication in programming. The excellent system of public junior colleges now established in the State of Florida allows the senior institutions to offer only junior and senior courses away from their campuses, unless a given junior college is unable to meet a local need and makes special request to a university for lower division work. In offering statewide programs of continuing education, consideration at all times is given to providing the highest quality programs at the lowest possible cost to the State of Florida. The continuing education programs now operating in the State of Florida allow for efficient and effective organizational patterns which provide institutional identity and autonomy while realizing the most effective utilization of resources.

XI. Future Expansion of the University System

With the establishment of nine state universities, the State of Florida has completed its goal of establishing universities close to its most populous areas. For the foreseeable future the nine institutions will be able individually to service the populations of their immediate vicinity, and collectively the State of Florida, by combining on-campus resident instructional programs with off-campus continuing education programs. Although the nine universities will provide adequate coverage of the educational needs that now exist, the future may well dictate additional institutions to serve Florida's rapidly growing population. The establishment of additional institutions, however, should evolve through an orderly process based upon determined need.

By demonstrating sufficient enrollment potential, communities not within commuting distance of a university may now request the nearest state university to offer one or more upper level or master's level courses in a specific discipline. When a predetermined number of certain kinds of courses are offered in a given community, however, and the enrollments in these courses have reached a specified level, the Regents should consider establishing in that community a university "center" which will develop and grow as student demand increases and the educational needs of the community become apparent. When a center reaches a predetermined size in terms of the number of courses offered, student enrollment, and resources available, it might very well be given "university branch" status. When such a "branch" has achieved a specified stage in its development, moreover, consideration would be given to granting it separate university status.

Quantitative criteria, however, must first be developed based upon the numbers and types of courses, minimum enrollments, library and other resources, which must be satisfied before the status of center, university branch, or separate university would be achieved. Communication with other states in the nation which have university centers and branches reveals that few quantitative criteria have been developed elsewhere. The following criteria result from a study conducted by the Chancellor's staff in collaboration with appropriate faculties and administrators in the State University System. The broad skeletal framework for development outlined below represents a sampling of exemplary criteria which will be augmented in the future by further consultation and study. Nevertheless, the broad pattern for development is clear in that future expansion may now occur within the geographical boundaries already established for the existing institutions and that growth which occurs will develop from present bases in the System. Orderly development of new institutions must follow some prescribed pattern so that existing strengths might be more effectively utilized in future expansion.

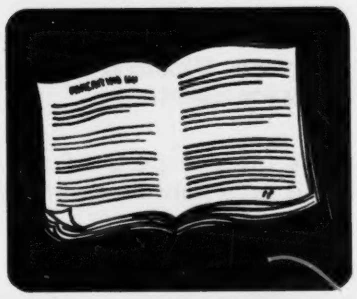
Multi-Campus Universities: Implications for University Development. — Within the next decade, the expansion of State University System services into the large metropolitan areas of Florida will provide circumstances that will call for multi-campus operations. Indeed, such an organizational structure is presently planned for the new Miami institution. The dissemination of campus locales would provide for separate institutional building concentrations in proximity to a central campus unit. This kind of planned multiplicity would more efficiently and effectively service population concentrations within a community, either a city or county. However, it should not be conceived of as an anarchic proliferation of campus units. The planning for institutions to be located in areas which have large, disparate population concentrations will take into account the most efficient and advantageous aspects of multi-campus organization at the inception of the institution. Such a multi-campus concept holds promise of units which are administratively malleable and which provide a medium to avoid the major aggregations with their attendant problems, which are now a considerable part of the modern education picture. Attention will then be directed specifically to the possible physical locations of additional campus units as the institution grows. Such growth, however, will be part of the planned development of the multi-campus institution within the framework of its urban setting and its most adequate service to the city. In this type or organization, all satellite campuses would be administratively responsible to the main campus, and would remain so within the planned growth guidelines of the urban institution. In short, the new urban institutions will be special cases, and the development of several campus locations in proximity to the main campus *will not* spawn new universities. Such planned metropolitan institutional growth, in other words, shall not be considered within the developmental policies outlined below for the orderly establishment of new universities in Florida.

In locations which are not appropriate as satellites of a multi-campus university, for geographical or other reasons, another kind of expansion may occur.

University Center Status. — When a total of 45 or more university classes are offered in a given community during an academic year, consideration should be given to authorizing a center for that community which would be administered by the nearest state university. These courses should have an average of not less than 20 students per class. Furthermore, at least one broad subject matter discipline, such as natural sciences, humanities, social sciences, business administration, or education, must be represented by a concentration of at least 15 classes. The Board of Regents would authorize the establishment of a center on the condition that the local community would provide adequate classroom, office, and library space at no cost to the University System. Such authorization by the Board of Regents would carry with it a commitment to allocate sufficient budget to provide adequate faculty, staff, and library resources for the university which would administer the center. Initially, the university would develop at the center a patterned sequence of upper division or graduate level courses that could lead to terminal programs or degrees on the parent campus. Eventually, degree programs in their entirety might be offered at the center, although degrees would be conferred only by the parent campus.

University Branch Status. — Granting university branch status to a center would be considered when the center enrolls a student population of 1,000 full time day students and 2,500 part time evening students. In addition, two or more complete degree programs should be available at the center. Authorization of branch status would carry with it a commitment by the Regents and the Legislature to make available the necessary capital outlay moneys in order to build an adequate physical plant.

Separate University Status. — When the branch has reached a full time student population of 5,000 and a determination has been made that there is a need for an additional state university, the Regents would request the Legislature to authorize separate university status to a well-developed branch. Again, legislative approval must carry with it provision for adequate money to support the appropriate growth of the newly separate state university.



XII . Articulation Between the State University System and the Division of Community Colleges

A. *The Division of Community Colleges*

In its initial report (1955), the Council for the Study of Higher Education in Florida strongly recommended the need for diversity in post-high school education, stating that this need could best be met by a partnership among the State University System, a system of community colleges, and the private degree-granting institutions in the state. Largely as a result of this recommendation by the Council, the Legislature established the Community College Council in 1955. A report was published in 1957 under the title "The Community Junior College in Florida's Future." This document, which was approved by the State Board of Education, contained recommendations for needed legal changes and a plan for establishing public community colleges in Florida. The plan would ultimately provide post-high school education within commuting distance of more than 99 per cent of the state's population.

In 1961, a report of a commission established by the Southern Regional Education Board recommended that each state should develop a strong system of two-year community colleges. The commission amplified this recommendation:

> These non-residential institutions, generally located in urban areas, can serve a variety of functions for which four-year institutions are not required. Among these are freshman and sophomore courses, vocational and technical programs, guidance and counseling services, specific programs to meet community needs and adult education.
>
> The community college is economical for both student and taxpayer. It can be responsive to local needs and a vital force in the community.
>
> These colleges, as now organized, are parts of the local public school program, separate two-year state colleges, or affiliates of the

State University System. Whatever the basis of the organization, however, three things are essential:

1. **They must be integral parts of the state system of higher education, and fully coordinated with the other parts of the system.**
2. **They must resist pressure to expand into four-year institutions, concentrating rather on achieving excellence in their two-year programs.**
3. **Their distinctive function must be recognized and respected. They are neither mere extensions of high school nor decapitated versions of the four-year college.**[1]

By 1968, the Division of Community Colleges, Department of Education, had virtually completed the plans made in 1957 for a network of community colleges. An uneven distribution of population among the state's 67 counties resulted in some of the colleges having an enrollment of less than 500 students, while others had many times that number (Table 6). Miami-Dade Junior College, with an enrollment of over 24,000, has the largest enrollment by far of any institution of higher education in the state.

B. *Programs of Community Junior Colleges*

Following the recommendations of the Council for the Study of Higher Education and the Community College Council, the Florida Statutes assigned three major functions to the community junior colleges. Section 228.14, F.S., provides that junior colleges shall offer:

1. freshman and sophomore education parallel to that commonly offered in the state universities;
2. occupational education often referred to as vocational-technical education;
3. programs of education for adults.

In addition to these three functions, the community junior colleges have become centers for community educational activities which include guidance, counseling, and cultural activities associated with educational institutions.

C. *The Impact of Community College Output on the Senior Universities*

The rapid but orderly implementation of the statewide plan for community junior colleges has resulted in substantial

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[1] *Within Our Reach,* Report of the Commission on Goals for Higher Education in the South, Atlanta: Southern Regional Education Board, 1961.

TABLE 6

COMMUNITY COLLEGES IN FLORIDA

(Listed According to Date Established)

	Date Established	Fall, 1968 Enrollment*
1. St. Petersburg Junior College	1927	9,371
2. Palm Beach Junior College	1933	5,279
3. Chipola Junior College	1948	1,236
4, Pensacola Junior College	1948	4,595
5. Gulf Coast Junior College	1957	1,971
6. Central Florida Junior College	1958	1,199
7. Daytona Beach Junior College	1958	2,338
8, Manatee Junior College	1958	2,375
9. North Florida Junior College	1958	1,113
10. St. Johns River Junior College	1958	1,266
11. Brevard Junior College	1960	5,006
12. Indian River Junior College	1960	1,217
13. Miami-Dade Junior College	1960	24,098
14. Junior College of Broward County	1960	4,877
15. Lake City Junior College and Forest Ranger School	1962	1,154
16. Lake-Sumter Junior College	1962	1,030
17. Edison Junior College	1962	1,194
18, Okaloosa–Walton Junior College	1964	1,940
19. Polk Junior College	1964	2,963
20. Florida Keys Junior College	1965	691
21. Florida Junior College at Jacksonville	1966	5,410
22. Santa Fe Junior College	1966	2,084
23. Seminole Junior College	1966	1,765
24. South Florida Junior College	1966	386
25. Tallahassee Junior College	1966	1,704
26. Valencia Junior College	1967	1,761
27. Hillsboro Junior College	1968	1,625
28. Pasco-Hernando Area	Authorized but not opened	–
	TOTAL	89,648

**Credit course enrollment, including college parallel and technical programs.*

changes in the patterns of attendance in post-high school education in the state. Opportunities provided by junior colleges have resulted in a substantial increase in the percentage of high school graduates in Florida who enter college in this state. From 1964 to 1968, this figure rose from 40.3 per cent to 46.7 per cent. Furthermore, as the community colleges bring more and more students into higher education, they irrevocably yield a larger and larger output of students who have accomplished two years of college study. In 1968, an estimated 6,000 junior college students entered the state universities, a major source of students for the upper division.

The Division of Community Colleges presently consists of a system of two-year colleges which has fulfilled its projected plan of a decade ago. It is also generally in keeping with the recommendations of the Southern Regional Education Board. Increased emphasis can now be accorded to matters of articulation by the Division, the State University System, and the private junior colleges and universities.

D. *Articulation Between the Two-Year and Four-Year Institutions*

Articulation between the community colleges and the State University System has been a major concern of the Board of Regents and the State Department of Education from the time the Council for the Study of Higher Education in Florida made its initial report. In 1955, the State Board of Education sponsored a professional committee for relating public secondary and higher education. The membership of this committee included representatives of the high schools, junior colleges, universities, State University System, and State Department of Education. The Director of the Division of Community Junior Colleges served as chairman. This committee centered its activities around solving problems and developing policy statements which would promote the smooth transfer of students from one level of education to another. Typical of these policy statements were the general education agreement, the transfer policy, and the advanced placement policy. "Task force" conferences are now held which emphasize the problems in the various disciplines, e.g., science, foreign languages, mathematics, business administration, pre-engineering, education, and music.

In the broad area of general articulation matters, the State University System has recently established the Council for Junior College Affairs. The membership of this Council will consist of one person designated as the Junior College Liaison Officer from each institution and will be chaired by the Vice Chancellor for Academic Affairs of the State University System. This Council should insure coordination of university and junior college activities with special emphasis upon broad academic concerns and matters of articulation policy. In order that basic policies be reviewed and updated and that the disruption of the student's academic progress be minimized, the staffs of the State University System and the Division of Community Junior Colleges must maintain continuing contact and liasion on all matters related to the operation of the junior colleges and universities.

E. *Future Development of Community Colleges*

The Division of Community Colleges has provided an outline of the policies that have been formulated to guide the community colleges in their development:

1. The major purpose of the community junior college is to extend educational opportunity below the baccalaureate degree level by keeping costs to students low, by providing opportunity within commuting distance for most people, and by offering broad and flexible programs of study.
2. Programs of occupational education should be provided in the community junior colleges to the extent needed in each area of the state. Insofar as possible, all post-high school occupational education should be centered in the community junior colleges.
3. Junior colleges should be recognized as the institutions where the majority of the freshman and sophomore level students will attend college. Existing freshman and sophomore level programs should be established by the University System only where there is substantial and sufficient evidence that the community junior colleges cannot satisfy the needs for this level of education.
4. The junior colleges should provide continuing educational opportunities for adults. Adult education activities in a community should be coordinated and duplication should be avoided when possible.
5. Five specific educational responsibilities of the

community junior colleges are:

a. *General Education* — to provide to all students additional general educational background.
b. *College Parallel Education* — to provide the basic first two years of bachelor's degree programs.
c. *Occupational Education* — to provide programs which will prepare individuals to find employment in our increasingly complex society.
d. *Continuing Education* — to provide programs and courses of continuing education at levels beyond the high school offerings for those who require that level of work and at appropriate levels for others who need further educational opportunity.
e. *Counseling* — to provide for all citizens the necessary testing, counseling, and other student personnel services which will enable each one to make appropriate decisions regarding his own educational progress.

6. Local control of the community junior colleges is essential and should be continued.
7. Adequate sources of local finance must be provided in order to support existing programs and to make it possible for all areas of the state to establish community junior colleges as soon as they meet the minimum enrollment requirement as provided in the criteria.
8. Since opportunity for post-high school education is of benefit not only to each individual but also the economy of the state, students should be encouraged to attend by holding costs as low as practicable and by making loans and/or scholarships available to defray such expenses as are necessary.
9. Under existing law and regulations only one junior college should be established in any county. In heavily populated counties additional major centers of the junior college may be approved by the State Board of Education. Additional major centers should be considered for a college only when the fulltime equivalent enrollment at each existing major center exceeds 3,000 students and when the projected enrollment to be served by the proposed center also exceeds 3,000 students. Additional centers sharing

facilities with high schools, or other institutions, may be approved where justified by geographic, economic, or other considerations.

10. Local areas not now served by junior colleges should be given all possible assistance and encouragement to establish junior colleges at the earliest possible date in order that education at this level may be available within commuting distance of all our citizens. Junior colleges should be established in all 28 areas not later than 1970.
11. The State Junior College Board and the State Board of Education should continue their coordination at this level of education. Provisions for scholarships should be made where necessary to make junior college education available to citizens of counties not within commuting distance of a junior college and to make available to all citizens of the state special occupational programs not provided in all junior colleges.
12. Development of programs of study for each college requires careful attention to the needs of individuals as well as those of business and industry. Each junior college should give careful consideration to all these factors and should develop programs particularly needed in its area of the state.
13. Junior colleges should maintain on-going programs of institutional research to determine ways of maintaining and improving quality of programs and of increasing efficiency and economy of operation.
14. Junior colleges should utilize every means of improving economy and efficiency of operation consistent with quality. Year-round operation, educational television, cooperative work study programs, independent study programs, and extended day programs are examples of successful developments that should be considered.
15. Since the diversity of educational offerings provided by a junior college is specifically designated by law, junior colleges should be maintained as junior colleges and should not be considered as a base for developing a baccalaureate institution.
16. Since the junior colleges are required to maintain programs of study below the junior level of the university programs, they should be ready to assume

principal responsibility for publicly supported lower division programs.

17. Admission to the post-high school programs of a community junior college should be based upon high school graduation or its equivalent except
    a. when the specific programs require definable skills, abilities or background in addition to high school grades, or
    b. when special permission is granted to students who can demonstrate that they will profit from the course.

    Admission to non-credit courses should be based upon factors relative to the nature of the course itself.
18. Adequate physical facilities must be provided to house the varied programs of the junior colleges.
19. Continued emphasis should be placed upon activities and agreements which will facilitate the smooth transfer of students from high school to junior college to university. These activities should give particular emphasis to articulation of high school and post-high school programs in the areas of curriculum and counseling.
20. Continued and increased emphasis upon the guidance and counseling functions must be provided in all institutions. This is particularly critical at graduation from high school and at completion of the junior college program. Personnel, facilities, and adequate support are essential.

F. *The Mutually Supporting Roles of the Two-Year Colleges and the State Universities*

Although the great majority of students who enter the community colleges today express the desire to complete the baccalureate degree, less than one-third of entering freshmen actually attain this objective. Recognizing the large number of students in the community colleges who terminate their higher education at the end of two years, the community colleges have placed increasing emphasis on providing occupational programs to meet the needs of individual students and to serve expanding business and industry in the state. Special emphasis has been placed on the industrial technician areas, the health occupations, and those occupations which relate to service and distribution that are so important to the tourism and the economy of Florida. As Florida expands industrially, moreover, the occupational programs in junior colleges will assume increasing importance among statewide offerings in higher education. New emphasis on vocational and technical education at all levels as expressed in federal legislation and in various national studies will give the junior colleges an ever-increasing responsibility in this area, although an expanding economy imposes additional demands upon all levels of higher education.

Systematic progression from the community college to the university on the part of those students who seek the baccalaureate degree exemplifies another educational function of the junior colleges. The general education and pre-professional programs which are offered by these two-year institutions afford educational opportunities to all of Florida's students wishing to enter higher education. The two-year graduates deepen the reservoir of potential professional manpower by enabling many talented young people to enter college who might not have done so had there been no community college available to them. The community colleges also provide trained manpower for technical and managerial openings and at the same time prepare the student of higher academic promise for the university. They thus fill the ever-increasing educational gap between the academic level of high school and the specialized skills required of university graduates in a highly technical society. The universities, in contrast, offer baccalaureate degrees needed by individuals who wish to prepare for professional work. There is, then, no conflict in educational purposes between these two sectors of public higher education, but instead, an interplay of mutually supporting roles.

G. *The Upper Division University and the Junior Colleges*

When the Division of Community Colleges was established, junior college graduates were to be a significant addition to the student populations of the state universities at the junior level. The most reasonable kind of institution to add to such an expanding university system in conjunction with the extensive expansion of the community college network was the upper division institution without freshman and sophomore classes. Instead of increasing the number of four-year universities, whose first two years would in a large measure be a duplication of lower division programs, the State University System decided to add upper division institutions in order to cooperate more effectively with the components of Florida's extensive community college structure. The implication of this decision proved to be a fruitful articulation between two segments of public education in the state. By 1968, the network of community colleges had grown to 27 institutions, which enrolled approximately 90,000 students. In the fall of 1969, nearly 7,000 community college graduates transferred to upper division study offered by the public universities.

The upper division universities in Florida are building upper division, baccalaureate programs in partnership with junior colleges. Three-year curricula leading to a master's degree have also been planned for qualified junior college graduates who express an early commitment to graduate study. The two new institutions, Florida International University in Miami, and the University of North Florida in Jacksonville, are planned as upper division universities, and will thus work closely with the community junior colleges in the state in a manner similar to the relationship already established at Florida Atlantic University and the University of West Florida.

XIII. Interaction of the State University System with Private Colleges and Universities in Florida

For many years, private colleges and universities in Florida have served to extend the higher educational opportunities available to the youth of the state. Stetson University, Rollins College, and Florida Southern College were all founded in the 1880's, at a time when the state's three major public institutions existed in a struggling, developmental stage, trying to evolve their educational roles. Each of the private institutions moved toward building strong liberal arts programs, and these endeavors supported the liberal arts education at the public institutions.

At the present time, Florida has 23 private degree-granting colleges and universities, and four private junior colleges. They range from the small sectarian institution to the large multi-purpose university. Enrollment at the private four-year colleges and universities in Florida totaled 38,592 in 1968; the total enrollment for the private two-year colleges in the same year reached 3,620.

A comparative analysis of enrollments in the private and public sectors of higher education over the past decade reveals two trends: (1) the enrollment in private colleges and universities continues to rise steadily each year, and (2) the total number of students enrolled in the private sector is decreasing as a percentage of total enrollment in public and private higher education in Florida. In other words, enrollment in the public universities and community colleges is climbing at a faster rate than is the case in the private colleges and universities.

During the past decade, the number of new private institutions founded has more than doubled, a developmental fact which parallels the number of new public institutions established. In the main, however, the newer private institutions have relatively small enrollments in contrast to the enrollments of the newer public institutions. While the private institutions existing in 1959 have upped their enrollments, they have done so at a slower pace than the public institutions, some of which have had an enrollment growth almost phenomenal in scope.

In 1959, the State University System enrolled 23,713 students, and the private degree-granting institutions enrolled 23,267. Ten years later, the State University System enrollment stood at 60,443, in contrast to an enrollment of 39,189 in the private baccalaureate and graduate institutions. But it was in the public junior colleges that an overwhelming enrollment gain was registered. While private junior college enrollment was rising from 2,133 in 1959 to 3,630 in 1968, the public community college enrollment exploded from 11,008 to 89,648.

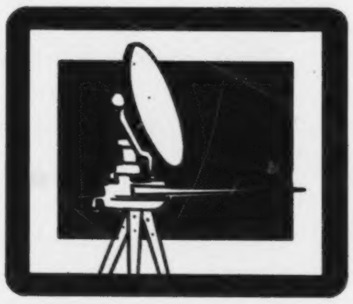
As a percentage of the overall enrollment in higher education in Florida, the enrollment in the private colleges and universities dropped from approximately 46 per cent in 1959 to about 23 per cent in 1968. In the absence of long-range enrollment projections for Florida's network of private colleges and universities, future estimates of the percentage of total college youth enrolled in public colleges and universities are hazardous. But enrollment trends in the past point toward a continuation of the decreasing percentage of students who attend private institutions, a figure which will reach 15 per cent by 1980, and then remain constant. Although private institutions have upped their enrollments in recent years and undoubtedly plan to continue this trend, their enrollment growth is more controlled than in some of the public institutions, especially the community colleges. Private institutions, by limiting their expansion to their income as supplemented by federal grants and long-term loans, generally project small enrollment gains in the immediate years ahead.

Private institutions comprise an essential part of higher education in the state, even though the trend toward a smaller percentage of enrollment of the state's population in such schools continues. Several of these institutions are successfully involved in curriculum and calendar experimentation, and are keeping the State University System informed of their progress in these and other endeavors. Voluntary, inter-sector cooperation takes place in the form of extended discussion of mutual problems. The presidents of the public and private universities meet from time to time to consider the statewide implications of federal aid for higher education, of student financial aid, and of proposed state legislation as it affects higher education throughout Florida. The Florida Legislature, moreover, has charged the State University System with considering the capabilities of the private institutions when expansions in the programs offered by the public universities are contemplated. Carrying out this charge is illustrated in at least one significant development — the state now subsidizes the University of Miami for each Florida resident enrolled in the medical school of the University of Miami. Total yearly payments to the University of Miami from the state for this purpose exceed one and a half million dollars. Nearly all the private institutions of higher learning in Florida participate in the annual survey of enrollments conducted by the Chancellor's staff, and six representative private degree-granting institutions (Florida Southern College, Jacksonville University, Stetson University. St. Leo College, Florida Presbyterian College and Fort Lauderdale University) also take part in the survey of the characteristics of entering students, an annual survey conducted by the office of the State University System that includes all the public schools and colleges as participants.

To date, cooperative planning in academic programs between the two sectors of higher education has been limited. Among the areas in which this planning has occurred, however, are continuing education, nuclear research, and oceanography. Economic development will intensify coordination in academic planning in the areas in which it is now taking place, and will extend to other academic areas that have not yet been the subject of joint review and discussion.

There are no current, long-term enrollment projections for the combined group of private colleges and universities in the state. The office of the Chancellor, however, in conducting feasibility studies for the proposed new state institutions in Miami and Jacksonville, consulted directly with the private institutions in those areas in order to determine whether establishing the new institutions would adversely affect the enrollments of existing universities. There is some likelihood that the Association of Independent Colleges and Universities in Florida will intensify its efforts to assemble collective enrollment projection data in the near future. If so, the planning for new institutions, public and private alike, will rest on a sounder basis than ever before. Even though substantial progress has been made in establishing cooperation between public and private higher education in Florida, additional efforts in inter-sector planning and program development must come about in the next decade if the state is to achieve the goal of integrating more fully the capacities and resources of the public and private sectors of higher education.

Another way that public and private sections of education interact is through a state-supported scholarship program. The Regents Scholarship Program recognizes all high school seniors in the state whose performance on the Florida Twelfth Grade Test ranks them in the top 10 per cent of the students tested and whose high school grade average is 3.5 or higher on a 4.0 scale. These students are awarded a certificate indicating that they are Regents Scholars. Each Regents Scholar who attends an accredited public or private college, university, or junior college in Florida is entitled to a scholarship based on his need for financial assistance. No scholarship will be more than the tuition and fees with a maximum award of $1200 a year. A Regents Scholar may continue to receive financial assistance for not more than the equivalent of eight semesters or twelve quarters provided he maintains a "B" average on fourteen hours per term.



XIV. Perspectives on the Financing of Higher Education in Florida

In Chapter IV an awesome prediction of growth in student enrollment in the State University System was presented. In the twelve-year span 1968-1980, FTE enrollment in the State University System has the potential of increasing by more than 300 per cent. Further examination of these projections also reveals that the composition of the 1980 University System student body will differ from the 1968 student body in that proportionately more students will be enrolled in the upper level (junior and senior) and graduate divisions. Figure 3 illustrates the change in student mix by level.

The change in mix reflects Florida's educational policy of planned diversion of lower division students to junior colleges and increased accessibility to higher education that is provided by the cooperating networks of community junior colleges and state universities in every major region of the state.

Upper level and graduate student instruction is relatively more expensive than lower division instruction. Consequently, tripling the absolute numbers of students within a decade presents a more complex resource growth need than proportionately increasing numbers alone would indicate, since more of these students will be enrolled in upper division and graduate level courses.

Although projections of resource needs will be presented in subsequent chapters, at this point attention can be directed to a rough projection of operating needs for the state universities of Florida by using techniques derived from an example presented by economist Seymour Harris in *The Economics of Higher Education*.[1] Harris writes that by the year 2000 the University of California state budget for operations

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[1] Seymour Harris, *The Economics of Higher Education*, College Entrance Examination Board, New York, 1967, pp. 3-4.

	Actual 1961	Actual 1968	Projected 1980
Lower	62.7%	39.6%	19.2%
Upper	31.4%	45.1%	61.0%
Graduate	5.9%	15.3%	19.8%
TOTAL	100.0%	100.0%	100.0%

Figure 3. Actual and Projected Student Mix by level of instruction, State University System of Florida.

should grow from the current $250 million (90,000 students) to $4 billion (320,000 students). Harris bases his assumption on enrollment growth on an estimated 4 per cent increase in cost per student compounded over the 35 years.

Placed in the Harris projection framework the 1980 State University System of Florida figures produce the results shown in Figure 4. Harris' projected 4 per cent annual cost increase represents, by his own admission, a very conservative factor, but the results, using the Florida projections, are equally striking. The State of Florida will need to provide five times the 1968-69 level of support for the University System in just over a decade. No allowance is made in this projection, moreover, for cost of living increases, for resources necessary for additional facilities, or for support of the state's junior college system.

The plain evidence of numbers may seem frightening at first glance, but nonetheless, it is also significant that over the past decade the Florida record has produced an equally impressive picture of support. A brief look into the past may give perspective and thereby temper the magnitude of the rough projections for the next decade.

State general revenue support for the State University System for fiscal 1969-70 has quadrupled since 1961 while enrollment has more than doubled. The increase reflects the change in student mix, which is shown in Figure 3, because of the planned control of lower division enrollment by restriction of admissions and the creation of the upper division universities in the State University System. The data shown in Table 7 relate the growth in support for the universities to other elements of the State educational picture and to the total amount of general revenue for the period 1961-62 through the 1969-70 legislative appropriation. Indeed, when the junior college expenditures are considered together with university expenditures as a total appropriation figure for the support of higher education, the 1969-70 appropriation represents a quintupling of state support for higher education over 1961-62. This same level of growth may be required simply for university support by 1980 as shown by the rough projections.

One measure of a state's willingness to support education is the relationship of state tax funds that are provided for education to the total personal income of the state. The use of such a relationship points up the dramatic increase in support for education which resulted from the 1968 Special Session. Table 8 illustrates the history since 1961-62 of Florida's educational effort at the state level as a portion of total personal income. County effort is not included in these figures. The growth in effort from 1967-68 to 1968-69 shows a 60 per

1968 Enrollment	57,375
1968 State Budget (General Revenue)	$118.5 million
1968 Per Student General Revenue	$2,065
1980 Cost Increase (Constant $)63% (4% per year compounded)	
1980 General Revenue/Student	$3,367
1980 Projected Enrollment	173,490*
1980 Projected General Revenue Needs	$584 million
Increase over 1968	393%

*Includes estimate of 2,780 for University of Florida Health Center and IFAS.

Figure 4. Rough projection of 1980 State University System of Florida operating budget requirements from State sources.

TABLE 7

COMPARISON OF GENERAL REVENUE EXPENDITURES* FOR TOTAL STATE BUDGET ALL EDUCATION: NON–HIGHER EDUCATION; HIGHER EDUCATION; JUNIOR COLLEGES; STATE UNIVERSITY SYSTEM

1961-62 TO 1969-70

	Exp. 1961-62	Exp. 1962-63	Exp. 1963-64	Exp. 1964-65	Exp. 1965-66	Exp. 1966-67	Exp. 1967-68	Budgeted 1968-69	Appropriations 1969-70
PART A. IN DOLLARS ($MILLIONS)									
Total General Revenue	$362.3	$396.3	$456.7	$493.6	$530.5	$565.6	$646.4	$1,008.6	$1,072.5
Education General Revenue	229.3	251.8	294.1	309.7	325.6	343.2	433.5	720.9	770.2
a. Non-Higher Education	188.0	207.4	229.7	233.9	240.7	242.5	312.2	542.9	566.3
b. Higher Education	41.3	44.4	64.4	75.8	84.9	100.7	121.3	173.0	203.9
1. Jr. Colleges	6.5	7.4	12.1	16.1	22.7	31.0	38.2	59.5	68.7
2. State Univ. System	34.8	37.0	52.3	59.7	62.2	69.7	83.1	113.5	135.2
PART B. AS A PERCENTAGE OF TOTAL GENERAL REVENUE									
Education General Revenue	63.3%	63.5%	64.4%	62.8%	61.4%	60.7%	67.1%	71.4%	71.8%
a. Non-Higher Education	51.9%	52.3%	50.3%	47.4%	45.4%	42.9%	48.3%	53.8%	52.8%
b. Higher Education	11.4%	11.2%	14.1%	15.4%	16.0%	17.8%	18.8%	17.6%	19.0%
1. Jr. Colleges	1.8%	1.9%	2.6%	3.3%	4.3%	5.5%	5.9%	5.9%	6.4%
2. State Univ. System	9.6%	9.3%	11.5%	12.1%	11.7%	12.3%	12.9%	11.7%	12.6%

*Unless otherwise noted

TABLE 8

STATE OF FLORIDA RELATIONSHIP OF GENERAL REVENUE (GR) SUPPORT OF EDUCATION TO TOTAL PERSONAL INCOME (PI)

1961-62 TO 1969-70

	PI Income $ Billions	GR For All Education As % of PI	Non-Higher Education GR As % of PI	Higher Education GR As % of PI	Jr. College GR as % of PI	University GR as % of PI
1961-62	$10.25	2.23%	1.83%	.40%	.06%	.34%
1962-63	$11.06	2.28%	1.88%	.40%	.07%	.33%
1963-64	$11.87	2.48%	1.96%	.54%	.10%	.44%
1964-65	$12.98	2.39%	1.81%	.58%	.12%	.46%
1965-66	$14.13	2.30%	1.70%	.60%	.16%	.44%
1966-67	$15.41	2.23%	1.58%	.65%	.20%	.45%
1967-68	$16.77	2.59%	1.86%	.73%	.23%	.50%
1968-69	$17.50	4.12%	3.10%	1.02%	.34%	.68%
1969-70	$18.50	4.16%	3.06%	1.10%	.37%	.73%

cent increase in relative effort for education as a whole. Higher education *in toto* experienced a 40 per cent improvement in relative support; the junior college position was improved by 48 per cent and the State University System received the lowest relative increase with 36 per cent. Table 8 also illustrates that little improvement in relative effort for total educational support was experienced from 1961 to 1967. During the same period, however, higher education as a whole improved in relation to personal income by 58 per cent. The junior college level of support increased four-fold.

Given the projections of personal income and student enrollment, the state support for education/personal income relationship may be used to project fund availability in 1980. A straight line projection of Florida's personal income which is based upon data from 1961 to 1967 produces a personal income estimate of $30 billion for 1980. Figure 5 translates the personal income estimate into an estimate of state funds which will be available for the support of the State University System and compares this funding estimate with the operating need estimate presented in Figure 4.

If one assumes that the state will agree to move to the $584 million figure, the question then becomes: Where will the money come from? Does the state have the potential to provide two per cent of its personal income for the State University System in competition not only with the other educational needs of the state but also with the growing demands for more state supported health and welfare services?

Some assistance in resolving these questions may be gained by examining Florida's tax potential. Kenneth Quindry has studied state tax potential for the Southern Regional Education Board.[1] The results of his report have relevance to the problem of financing higher education in Florida. He has compared relative taxing among the states and used the relationship to the average as a measure of a state's unutilized tax potential. Quindry's findings on Florida are summarized as follows:

1. Florida is utilizing the full potential of sales taxes, selective sales taxes, and gross receipts taxes.
2. Florida has an unutilized annual potential of $41.9 million in *ad valorem* property taxes (if one assumes no millage limitations).
3. Florida has a great, unutilized potential in personal and corporate income tax. (Quindry reports that at

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[1] Kenneth Quindry, ***State and Local Revenue Potential***, Southern Regional Education Board, Research Monograph No. 15, SREB, Atlanta, 1969.

1980 Total Florida Personal Income (PI) Projection	$ 30 billion
1969-79 Per Cent of PI for State University System	9.73%
1980 State Funds Available Using 1969-70 Rate	$219 million
1980 Rough Projection of University System Operating Needs	$584 million
Difference Between Fund Estimate and Cost Estimate	$365 million

Figure 5. Projection of state funds available for the State University System compared with need projection from Harris Model.

the beginning of 1968, 39 states used some form of personal income taxes, and 41 states used corporate income taxes.) Florida's potential in 1967 from both sources was over $396 million.

Quindry notes the great growth in financing performance for state and local governments since World War II, but sees no abatement in re-occurring state and local fiscal crises. Federal aid is on the rise, but will not provide the needed funds. He concludes that using underutilized tax sources must be the means by which state and local governments contend with tax systems that do not provide automatic tax increases to match an expanding economy.

Although per capita tax growth in the states has increased by over 45 per cent, Quindry shows that in the last decade the tax level when related to total personal income has grown only 4 per cent as a national average and only 3 per cent in the South. From this Quindry concludes that, "The states clearly have the capability to finance adequate levels of government service." Quindry writes that the distribution of income is as significant as total or per capita income. In the South as compared with the nation, a disproportionately higher percentage of the taxpayers and family units are in the lower income classes.

Increased state funds are not, however, the only possible source of support for public universities. Two other possibilities present themselves: (1) the federal government, and (2) increased student fees. The topic of general federal operating support for higher education has recently received attention. From the 1963 "Reuss Report" on the maldistribution of federal research funds to recent pleas by the American Council on Education and the Carnegie Commission on Higher Education for general institutional support, increased federal support to higher education has been mentioned as a panacea for the ills of higher education finance.

Some authorities such as John Folger, Director of the Tennessee Commission on Higher Education, see the post-Viet Nam era as a period of substantial increase of general federal support for higher education. Although Roger Freeman suggests that general institutional support from the federal government will not be forthcoming, he nevertheless contends that the most effective way to provide federal assistance to higher education (public and private) is through some sort of tax credit plan, which would allow possible increases in student fees or state taxes in order to finance additional costs.[1] Several attempts at passing such federal legislation have failed, however, most notably Senator Ribicoff's 1964 move for comprehensive tax deductions for the higher education expenses of families with college student members.

A second source of additional revenue for the universities could be increased student fees. Florida's growth record in this regard has been as impressive as state support has been. Data on student fee increase is shown in Figure 6. Figure 7 indicates that Florida is well ahead of the U.S. average in tuition charges,

The comparisons and relationships presented in Figure 6 are introspective views of Florida's investment, present and future, in the higher education of her citizens. The Southern Regional Education Board (SREB) reports allow for an interstate comparison of southern state support for higher education. Figure 7 illustrates the position of Florida compared not only with the averages from all the states but also, compared with the SREB states.

The SREB facts show that Florida is high in fees, has a good legislative record in appropriation gains, and supports its four-year institutions relatively well. (Once again the control of lower division enrollment produces an abnormal student mix heavy on the upper and graduate levels and thus distorted cost figures on a comparative basis.)

The data and views presented above invite no easy solution to the problem of financing public higher education in Florida, nor do the figures accommodate the needs of other segments of the state enterprise. The problem, however, is evident. It will be difficult for Florida to support the projected level of growth for the University System, other educational needs in the state, and the remainder of the state's public effort within the limits of the present state financial structure. The actual level of growth, the nature of the student, and the role of the federal government are questionable areas which will, together, shape the final solution to the problem of support for Florida's University System.

The operating budget projections and facilities projections which follow add detail to the general perspective presented in the present chapter.

[1] Roger Freeman, *Crisis in College Finance.* Washington: The Institute for Social Science Research, 1965. Chapter 10.

Florida Resident Matriculation Per Academic Year			% Increase over Previous Year
1961-62	S	$226	0
1962-63	S	226	0
1963-64	T	226	0
1964-65	T	226	0
1965-66	T	260	15.0%
1966-67	T	260	0
1967-68	Q	300	15.4%
1968-69	Q	375	25.0%
1969-70 (525 Graduate)	Q	$450	20.0% (40% Graduate)

S = 2 Semesters
T = 2 Trimesters
Q = 3 Quarters

Figure 6. State University System matriculation fees (Florida resident) 1961-1969 with annual percentage growth calculated.

A. Median Annual Cost of Tuition (1967-68) (Four-year institutions)

U. S.	$302
SREB States	$296
Florida	$375

B. Eight-year Gain of Appropriations for Higher Education (1960-1968) (Includes two-year and four-year institutions)

U. S.	233%
SREB States	229%
Florida	278%

C. State Operational Support of Four-Year Institutions per Student 1962-63 and 1967-68; Per Cent per Student Changes 1962-63 to 1967-68.

	Per Student		
	1962-63	1967-68	1962-67 % Change
U. S.	$ 907	$1,116	+23.0%
SREB States	830	1,007	+21.3%
Florida	1,347	1,291	4.2%

D. State Operational Appropriations for Higher Education per $1,000 of Personal Income, 1960, 1967.

	1960	1967
U. S.	$3.51	$7.04
SREB States	4.22	7.73
Florida	2.41	7.64

Figure 7. Comparison of selected Florida higher education statistics with SREB states and the United States.

XV. 1980 Projected Operating Needs for the State University System

A continuing challenge for higher education is securing the financial resources to support college and university programs. The words of Dr. Kenneth Roose of the American Council on Education at a recent meeting of executive officers of statewide systems of higher education may indicate the financial problems facing higher education in the next decade. Roose suggested that higher education must face some of the same increased productivity tests as other enterprises in our society. This might mean, he said, that a 50 per cent rise in the number of students each faculty member teaches could become the manner in which faculty compensation might keep pace with the increasing cost of education and the cost of living. The challenge of higher productivity, however, runs counter to one popular solution to current educational problems. Current thinking sees the lowering of student-faculty ratios as the route to "quality" education. To strike a compromise between the two stated positions, high productivity and low student-faculty ratios, the cost projection data presented below extend the conditions of the present into the 1980 sphere without allowing for significant policy changes over current practice.

Since 1959 a student workload-oriented analysis has been the basis for evaluating the instruction and research needs for the University System. The analysis was developed by the cooperative efforts of the University System and the State Budget Director's Office. Over the years, the analysis has been modified and expanded. The core of the analysis is the relationship of faculty needs to student credit hours expressed by a so-called "productivity" ratio. Second order relationships "generate" faculty positions for research, student academic counseling, and academic administration. The analytical approach noted makes some gross distinctions among institutions, but a major distinction is made on the basis of the level of instruction (lower division, upper division, beginning graduate and advanced graduat[illegible] For the purposes of CODE, Phase I, detailed calculations [illegible]ve only been made for the instruction and research fu[illegible]on. An estimate for the remainder of the budget is accomplished by extending the current relationship between resources dedicated to instruction and research and the other university activities which are included in the educational and general area.

One objective of the development of the PPB System mentioned in Chapter II is to increase the precision of estimating resource needs on the basis of programs. Until that work is completed, the current system is the best estimating tool available. The analytical treatment now used is not as meaningful, however, for specialized programs, such as the University of Florida Health Center and Institute of Food and Agricultural Sciences (IFAS), [1] the Medical/Nursing Complex of the University of South Florida, and the planned College of Veterinary Medicine at the University of Florida. Approximation of resource needs for these units is based on planning documents produced for the expansion of the University of Florida Health Center and the Veterinary Complex and the development of the University of South Florida Medical Complex. The projection for IFAS is a trend projection based on the last five years of experience.

The nature of the following projections is, it must be stressed, an extension of present conditions and does not discriminate among differing costs of varied academic programs. A 4 per cent per year inflationary effect is assumed. The estimates do not include, furthermore, amounts for contract and grant research and auxiliary operations. It is planned that future resource estimating procedures will address all sources of funding as they apply to the programs of the institutions in the State University System.

The awe which is inspired by the expected numbers of students in the next decade is overshadowed by the estimates of financial resources needed to support those students. In Chapter XIV a rough estimate of operating general revenue needs was calculated for quick comparison with the present. A figure of

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[1] The Institute of Food and Agricultural Science, (IFAS) was created in 1965 to embrace three areas of activity in agriculture: Instruction (through the College of Agriculture and School of Forestry); Research (through a statewide system of experiment stations); and Extension (through a county-oriented network of county agents and home demonstration agents.)

$584 million resulted, five times greater than the current effort. Below, a product of the more detailed calculations which appear in Appendix II places a sharper focus on the operating resource question and interjects, moreover, the anticipated change in student mix as a cost escalating factor.

Table 9 presents an estimate of 1980 operating needs for the System. The institutional details for 1980 found in Appendix II should be treated with great care as need estimates and not as allocative decisions. The phenomenal result is a projection of just over $1 billion for support of the University System in 1980. Assuming the 1969-70 relationship between state general revenue and other funds of 72 per cent, approximately $720 million with the rough estimate of $584 million shows the effect of the increasing complexity of the University System.

The human resources to support the expanding university educational program in 1980, notably faculty resources, are impressive. Approximately 10,000 faculty should be needed for the nine educational and general programs (not including the special units noted above) compared with 4,581 in 1969-70 (see Appendix II for details).

The next chapter addresses the subject of capital outlay need estimates. Even without considering capital needs, the estimated 1980 operating needs for the University System alone approach the 1969-70 general revenue budget for all of state government.

Increased planning and management skill will be needed to coordinate the ever increasing demands for higher education opportunities and the resource requirements necessary to meet those demands. It should also be emphasized that the projected operating needs presented here do not include estimates for the state's growing and important Junior College System.

TABLE 9

STATE UNIVERSITY SYSTEM OPERATING NEED ESTIMATE—1980

	Calculated Dollar Estimates	Cost of Living Differential*	Adjusted Projections
Total Amount for 9 E & G Budgets	$516,401,076	1.63	$ 841,733,755
UF – IFAS	$ 30,222,647	1.63	49,262,915
UF – Health Center	$ 43,673,956	1.63	71,188,548
UF – EIES	$ 6,031,000	1.63	9,830,530
UF – GENESYS	$ 1,273,053	1.63	2,075,076
UF – Veterinary Medical School	$ 2,128,350	1.63	3,469,211
USF – Medical School	$ 5,494,600	1.63	8,956,198
Chancellor's Office	$ 11,234,687	1.63	18,312,540
TOTAL STATE UNIVERSITY SYSTEM	**$616,459,369**		**$1,004,828,773**
	% of Needs from General Revenue		72%
	Dollars needed from General Revenue		$ 723,476,717

*Assumes 4% annual cost of living increase compounded to 1980

XVI. Space Needs and Capital Outlay 1968-1980

A. *Projections of Facilities Needs*

Since 1967 facilities needs for the state universities have been estimated by a method which combined workload data (students and staff), square footage standards for different types of space (classroom, office, etc.), and utilization standards for instructional space. The "square footage" approach replaced the traditional listing of specific building priorities since such a listing provided no visible validation of facilities needs. The new "square footage" approach has been accepted by the state executive and legislative branches as an orderly process for justifying and evaluating capital outlay needs. The scrutiny of policy decisions as to enrollments, space standards, and construction cost data by the 1969 Legislature, however, produced a projected figure more modest than that requested by the Board of Regents. For the purpose of presenting a conservative picture of 1980 facilities needs, therefore, the factors used by the legislature have been incorporated into the estimates listed below.

Table 10 is a summary of projections which are shown in detail in Appendix III. Special facilities needs in health have not been formulated in the same manner as general space needs and are listed as additives in project form. The amount listed for the University of Florida Institute of Food and Agricultural Sciences is a projection to 1975 based on a unique space factor developed to accommodate the agricultural mission IFAS performs.

The conservatism of these projections should be emphasized in two ways:

1. Costs per square foot used are projected 1975 figures which represent a 5 per cent per year increase over the 1971 cost estimates accepted by the 1969 Legislature. Information on recent construction increases show the anticipated 5 per cent

TABLE 10

STATE UNIVERSITY SYSTEM OF FLORIDA SUMMARY OF 1980 ACADEMIC* SPACE NEEDS BY TYPE OF SPACE

	In $ Millions
General Purpose Classrooms	$ 41.0
Teaching Laboratories	38.1
Library and Study Facilities	41.6
Learning Resources	4.3
Research Space	147.5
Office Space	108.5
Auditoria, Theaters, and Museums	18.5
Physical Plant Service Space	9.5
UF – IFAS	5.4
UF – Health Center	33.2
USF – Health Center	12.5
UF–Veterinary Medicine School	12.5
Sub-Total	**$472.6**
Add 10% for Utilities	47.3
Add 2% for Site Development	9.5
TOTAL	**$529.4**

*Does not include projections for student unions, student health services, or student housing, It is assumed that such facilities will be supported by student fees.

increase to be extremely low. The 1975 point was used with the assumption that construction will be spread between 1969 and 1980.

2. Space factors used are those that have been adopted by the Legislature. It should be noted, however, that the Board of Regents has raised some questions about the adequacy of these factors with the responsible legislative committees.

Fall term enrollments were used to make the projections. Although the Legislature has adopted the goal of achieving level year-round enrollments in order to reduce facilities needs, adoption of three or four quarter enrollment averaging could reduce the projections up to 10 per cent. Since the universities are growing more at the historically stable upper and graduate levels, however, enrollment averaging becomes a less significant limiting factor in the process of projections.

B. *Capital Outlay Financing*

The question of capital outlay financing was not addressed in the general chapter on finance largely because funds for facilities construction have not been a stable element in the financial picture through the years. Projection based on past experience, therefore, is risky. Since 1963 the Higher Education Bond Amendment Program has provided a modest construction level for the three state-supported systems — the State University System; the Community Junior College System; and the area Vocational Technical Centers. However, the passage of the new Florida Constitution negated the bond authority effective June 30,1969. Subsequently, the 1969 Legislature proposed a constitutional amendment to be on the ballot in November 1969 which would restore the Bond Program. Thus, if the Higher Education Bonds are reactivated following the results of the November ballot the revenue potential through 1975 as estimated by the State Department of Education is shown in Table 11. (The people passed the amendment and the bonding authority has been reinstated through 1975.)

If one adds to the $160.2 million (6.5 per cent rate) presented in Table 11, a conservative estimate of $60.7 million for each of the next two biennia (through 1977-79), $281.4 million would be available from the bond source for state capital outlay support for *all* higher education activities. And, if the $281.4 million is compared to the more than half billion dollar requirement for the University System, the discrepancy is apparent even without considering the needs of the junior

TABLE 11

REVENUE POTENTIAL OF HIGHER EDUCATION BOND PROGRAM 1969-75

	Bond Interest Rate (In $ Millions)		
Biennium	6.5%	6.0%	5.5%
1969-71	$ 47.8	$ 49.8	$ 52.8
1971-73	51.7	53.7	56.7
1973-75	60.7	63.7	66.7
TOTAL	**$160.2**	**$167.2**	**$176.2**

Source: Capital Outlay and Debt Service Office, State Department of Education.

colleges and the area vocational technical centers. Projecting the bond program through 1979 assumes a constitutional reauthorization of the program.

Part of the difference between need and projected income may be provided by the federal government through its support programs. In addition to the advent of the State Bond Program, 1963 also marked the first year of general federal support of public and private higher education through funds provided by the Higher Education Facilities Act. Since 1963 the University System has been the benefactor of over $17 million for undergraduate facilities as well as several million dollars for graduate facilities under Title II of the Facilities Act and special project grants from such agencies as the National Science Foundation and the National Aeronautics and Space Administration. At the present time, the future as well as the level of federal support for construction is in doubt, except for federal participation in building medical and health related facilities. The first Nixon budget contained no funds for Title I support of four-year institutions and no funds for graduate facilities under Title II. The preferred mode of support appears to be shifting to an interest subsidy program which would guarantee payment of interest charges above 3 per cent. Such a federal plan would fit well with a state bonding program.

Nevertheless, the possible withdrawal of federal grant funds beclouds the projection of capital outlay fiscal needs. This possibility is relevant to state planning, since the 1969 legislative session anticipated $72 million in federal support as part of its legislative program. Through 1975, as it now stands however, only the $27 million expected for the support of medical facilities is within reach. The Higher Education Bond program plus the anticipated federal support will not finance University System needs, much less the requirements of the other educational units supported by the bonds. Additional funds must also be requested to support renovation needs. As the square footage approach is applied, funds must be secured to maintain the quality of usable space included in the inventory figure that is deducted. As in the operating area, new sources of funding must be secured in order to support higher education construction. The potential use of general revenue for this purpose, on a "pay as you go" basis, will serve only to complicate the process of providing for operating needs. A *new* funding program must be developed if Florida is to meet the capital outlay and operating requirements of the next decade in its system of public higher education.

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XVII. Campus and Physical Planning

The Master Plan of Physical Plant for a University System is a pattern for projected growth intended to serve the educational requirements of the System with physical facilities that appropriately recognize both aesthetic demands and technical requirements. The plan must contain, moreover, adequate flexibility in order to adjust to changing educational requirements developing from newly evolved knowledge and the continuing evolution of educational philosophies. Inasmuch as each new physical facility which is built is a commitment to the implementation of the long-range development of the campus, continuous communication is essential between the educational staff and the physical planning staff. This communication produces for a specific project a statement of various educational activities, the delineation of functional relationships between these activities, and a summarization of the type, nature and quantities of the space required to accommodate such activities. Reduced to written form and supplemented by an estimate of probable costs, the result is a building program. Appropriately, it originates from the "grass roots" level and, since it is a reflection of the aspirations and hopes of a given department or unit, it represents advocacy planning.

The building program advocated by the department or unit must be reviewed, however, at the executive level of the university. At this level, management planning may recommend either approval, rejection, or modification of the building program in order to conform to the aims and objectives of the master educational plan advocated by the university administration; not only should the proposal itself be available for consideration, but various alternatives and their implications should also be explored. Through such comprehensive planning growing out of continuous meetings between the department or unit staff, the university administration, and the Regents physical planning staff, alternatives can be evaluated so that the best of the alternatives may be recommended for implementation. In order to provide an optimum environment for the complete communication between the educational needs and philosophies of the academic staff and the appropriate responses incorporated in the physical planning process, moreover, on-campus planning staff will be on the budget of the individual universities.

Once the university president has reconciled and given priorities to the various requests from within his university, with all known factors taken into account, he submits to the Chancellor a plan of priorities and budgets for all his capital outlay needs. In earlier chapters of CODE it was shown that the Chancellor's staff makes a determination of financial needs for capital growth which is directly related to projected student enrollment at each institution for the next decade. The projections, in turn, are related to the educational programs and to such different categories of space needs as general classroom space, office space, laboratory area, library area, and other specialized requirements. Plans for priorities and for budgets received by the Chancellor from the university presidents are analyzed in light of these and the availability of money and are combined into the Capital Outlay Implementation Plan (COIP) for review by the Board of Regents and the Board of Education. After final adoption of a COIP, the president submits the building programs for authorized individual projects to the Chancellor's staff for review. Up to this point, the impact of planning has been related to wishing, hoping, aspiring and laboring to bring realization to the academic needs of the university as they are manifested in teaching and research facilities. In short, new construction represents the combination of intellectual, aesthetic, and physical entities in order to accommodate the measured growth and increasing stature of a given academic community.

The individual building programs received by the Chancellor's staff are reviewed to determine whether the space provided and the program accommodated are consistent with the authorized role and scope of the university, whether the proposed building contributes meaningfully to the reduction of existing space deficits, whether it contributes to the long-range development of the physical plant, and whether the budget proposed is realistic for the proposed scope of work.

After approval of the building program by the Chancellor's staff, the specific portion of a master plan represented by the individual building is transformed into action. Within the constraints imposed by the allocation of money approved in the allocation of priorities and within the approved building program, the design of the building and the construction documents for it are prepared by private architectural firms in the state. These individual projects are coordinated with and correlated to the master plan of physical plant through liaison with the Regents physical planning staff. Development of the master plan thus obtains a quite rigorous continuity through liaison with physical plant planning and development. Indeed, the campus planner has been involved from the initial dream to the fulfillment of that dream. He has projected, furthermore, the relationship of this project to future projects through placement of the building, sizing of the utility services, location of campus roads and parking lots, and even to the strengths of foundations. Aesthetic considerations, pedestrian traffic and safety, access, and relationship to the surrounding environment are all factors to be considered in the development of a university campus physical plan.

The administration of the bid process and the supervision of construction was provided by the Regents' Architect through the regional offices of the Construction Division and through the on-campus staffs of resident inspectors. The Governmental Reorganization Act of 1969, however, transferred the responsibilities and staff of the Regents Construction Division to the Department of General Services, Division of Building Construction and Maintenance. Such a transfer strengthens the need for campus planning. Relieved of the duties associated with the function of the professional architect, the Chancellor's physical planning staff will initiate several essential activities. Although inventories of space are maintained now at the universities and in the Chancellor's office, no evaluation exists of the quality of the space nor of its potential for modernization or conversion to use for other purposes. In order that these data be complete, survey teams appointed from the University System and from private professional offices of the state under the direction of the Chancellor's physical planning staff will periodically visit the universities in order to evaluate available space. A systematized procedure is being formulated and quality will thus be included as a factor in all space inventories. Such an evaluation will significantly affect the future development of campus physical facilities and will lead not only to a more economical use of existing space, but also to a more effective and efficient planning scenario for the future measured growth of the individual universities within the State University System.

Quantitative standards will also be refined as they may relate, for example, to land density utilization, minimum or maximum square footage allocations, and to standards of quality where applicable. Planning concepts and construction techniques which offer promise of buildings of greater adaptability, lower construction costs, or more efficient use will be examined and evaluated so that those meriting adoption may be incorporated into the University System construction program. By the incorporation of advanced construction techniques and through the combined efforts of the Chancellor's staff and of the decentralized planning staff for physical facilities, expenditures for new construction will reflect maximum return in environment and educational facilities for public investment in the higher educational physical plant.

APPENDIX I

PROCEDURES FOR PREPARING PROPOSALS FOR NEW GRADUATE PROGRAMS

Proposals for new graduate programs should include a clear description of the contents of the program, justification, faculty and resources currently available, additional faculty and resources necessary to implement the proposed program, and the cost. Departments proposing new graduate programs should provide the necessary information by completing the questionnaire contained in the following pages. Criteria for establishing new graduate programs should be kept in mind by the administrators and faculty of the institution preparing the proposal.

Outside Consultants

Institutions proposing new graduate programs may employ outside consultants for assistance in planning the program. Upon receipt of the proposal, the Chancellor's office may require the proposing university to employ outside consultants selected by the Vice Chancellor for Academic Affairs to evaluate the proposed program.

Time Schedule

Before a proposal is presented to the Florida Board of Regents for final action, it will normally be reviewed by the Office of the Vice Chancellor for Academic Affairs, appropriate faculty in each of the several universities in the State University System of Florida, the Curriculum Committee of the Board of Regents, and , in some cases, outside consultants. It is advisable, therefore, that universities submit proposals to the Chancellor's office at least six months (excluding July and August) in advance of the date they would like to have formal authorization from the Board of Regents. Thirty-five copies of the proposal should be submitted to the Vice Chancellor for Academic Affairs for appropriate distribution.

Title Page

The title page of the proposal should follow the format presented on the following page. Only three copies need to have original signatures.

PROPOSAL FOR THE INITIATION OF A NEW GRADUATE PROGRAM
Submitted by

University Submitting Proposal

Name of College or School	Name of Department(s)

A New Graduate Program Leading to the

Master's or Doctoral (Give complete name of Degree)	in	Academic Specialty or Field

Proposed Starting Date

Institution's Additional Financial Commitment from State Appropriations for the First Year and the Second Year of the Proposed Program (Indicate the dollar amounts appearing as totals for the first and second years under Column C on Page A-15.

First Year $ ____________

Second Year $ ____________

The signing of this proposal constitutes a commitment by the university that if the proposal is approved, the additional financial commitment indicated above and the criteria for establishing new graduate programs have been or will be met prior to the initiation of the program.

Department Head or Chairman	Date	Vice President for Administrative Affairs Or Equivalent	Date
Dean of the School or College	Date	Vice President for Academic Affairs Or Equivalent	Date
Graduate Dean	Date	President	Date

Abstract of Proposal and Proposed Catalog Description

An abstract of the proposal with justification for the program (not more than two or three pages) and a complete proposed catalog description, including admission and degree requirements, should be inserted between the title page and the body of the proposal.

Proposal

The proposal should consist of clear and concise replies to the questions which follow. Replies should follow the same sequence as the questions. Please precede each reply with a statement of the question being answered.

I. Definition of the Academic Area or Field of Specialty

  A. What subspecialties or areas of concentration will be emphasized during the initial years of the program? (For example, a program in economics may have faculty representing such subspecialties as econometrics, economic development, history of economic thought, income and employment theory, industrial organization and public policy, international economics, labor and industrial relations, money and banking, price and value theory, public finance. A program in physics may include such subspecialties as accelerator design, electromagnetic theory, molecular spectra theory, nuclear physics, solid state experimental, solid state theory, ultrasonics.)

  B. Are there other subspecialties that you anticipate adding as the program develops?

  C. Do you intend to avoid certain subspecialties?

  D. If this program is approved, does the institution anticipate proposing a higher degree level program in this specialty at a later date? If so, please describe and indicate anticipated date of submitting proposal.

II. Information About the Institution and Its Existing Programs

  A. 1. Indicate the total student enrollment (FTE and headcount) on the main campus of the university during the most recent fall term for

      a. lower division;
      b. upper division;
      c. beginning graduate; and
      d. advanced graduate.

2. Indicate the total FTE faculty and headcount on the main campus of the university during the most recent fall term.

B. Does the proposing department currently offer a bachelor's degree in the field of the proposed program? Master's degree? State the year that each of these degree programs was initiated.

C. How many bachelor's degrees have been earned in the department during each of the three years (June to June) preceding the date of submission to the Chancellor's office of the proposal for the new program?

D. What is the current total number of declared baccalaureate majors in the department? How many of these will graduate this coming June? By the end of summer session?

E. If this proposal is for a doctoral program:

1. To which of the following divisions or categories does the department belong: natural sciences, social sciences, humanities and fine arts, education, business administration, engineering, agriculture, home economics, library school, social welfare, journalism and communications, other (name)?

2. How many departments in your university, including the proposing department, belong to this division or category? How many of these departments are authorized to offer the master's degree? How many the doctor's degree? List all the departments belonging to this division or category on the table on page A-6.

3. Answer question 3 by completing the table on page A-6.

   a. Indicate the number of main campus resident master's degrees and doctor's degrees awarded in *each* of the departments of the division or category during each of the three years (June to June) preceding the date of submission to the Chancellor's office of the proposal for the new program

   b. What is the total number of main campus resident master's degrees and doctor's degrees conferred collectively by all of the departments in this division or category during each of the three years (June to June) preceding the date of submission to the Chancellor's office of the proposal for the new departmental program.

c. Indicate the total number of master's degree equivalents produced by each of the departments authorized to offer a doctoral program during each of the same three years used in the preceding question. Master's equivalents may be produced only by departments authorized to offer the doctorate. A master's equivalent is a student who has completed 51 or more credits acceptable toward the doctorate while enrolled in the department and is currently enrolled as a doctoral student in that department but does not intend to obtain the master's degree.

d. Indicate the total number of master's degree equivalents produced by all the departments in this division or category during the same calendar years used in the preceding questions.

4. Does the department proposing the new program now offer a master's degree program in this discipline? If so, what year was the program initiated?

5. How many master's degrees with theses earned on the campus have been conferred by the department during each of the same three years used in the preceding questions? How many without theses?

6. What is the current total number of master's level students in the department? How many of these will complete the master's degree program requirements this coming June? By the end of the summer session?

III. Objectives of the Program

A. Does the proposed program envision the training of research specialists, or the preparation of broadly educated teachers, or the training of professional practitioners, or others? How does it plan to achieve

		During the 1st Year Preceding the sub-mission Date of the Proposal (June 19__ to June 19__)			During the 2nd Year Preceding the Sub-mission Date of the Proposal (June 19__ to June 19__)			During the 3rd Year Preceding the Sub-mission Date of the Proposal (June 19__ to June 19__)			Totals		
Departments in the Division including the Proposing Department	Degrees Currently Authorized*	Degrees Awarded		Master's Equivalents Produced	Degrees Awarded		Master's Equivalents Produced	Degrees Awarded		Master's Equivalents Produced	Degrees Awarded		Master's Equivalents Produced
		Master	Doctor		Master	Doctor		Master	Doctor		Master	Doctor	
Totals													

*Indicate the highest degrees currently authorized for each department listed by placing after the name of the department a (B) for bachelor's, (M) for master's, and (D) for doctor's.

these objectives?

B. How would this program help achieve the objectives of your university in terms of its role and scope within the University System?

C. Enumerate any indirect benefits which may accrue from the establishment of the program.

IV. Present Course Offerings

A. How many undergraduate courses are currently listed by the department in the university bulletin?

B. How many undergraduate courses were actually taught by the department in each quarter of the past year?

C. List the undergraduate courses that were taught in each quarter of the past year by number, title, and credits and indicate the enrollments in each course each quarter.

D. How many graduate courses are currently listed by the department in the university bulletin?

E. How many graduate courses were actually taught in each quarter of the past year?

F. List the graduate courses that were taught in each quarter of the past year by number, title, and credits and indicate the enrollments in each course each quarter.

V. Courses of Study Leading to the Proposed Degree

A. List the courses currently offered by the department which will be included in the course requirements of the proposed program. Name the faculty person(s) who will teach each of the courses listed.

B. List new courses that would be offered by the department as part of the proposed graduate program by number, title, and credits. Would these additional course offerings be of interest to students not majoring in this particular area of study? If so, to whom? Name the faculty person(s) who will teach each of the courses listed.

C. How many and which of these new courses will be offered during each of the three terms following the initiation of the program?

D. List courses from other departments or schools that will also be used as part of the program of study leading to the proposed degree.

E. List research and dissertation requirements.

F. 1. What core of courses, if any, will be required of all students enrolled in the proposed program?

   2. Give an example of a typical student program in each subspecialty or area of concentration listed in the answer to question I.A.

VI. The Strength of Supporting Areas of Scholarship and Reasearch Facilities

A. Please list other departments or units in the university which would provide support to the program herein proposed (for example, a new program in chemistry must be supported by departments of mathematics and physics). Indicate the highest degree authorized for each of the supporting departments.

B. Please give brief indications as to the strengths or weaknesses of each of these supporting departments in terms of support to the proposed program.

C. Please list any unusual research facilities available in other departments or schools which materially strengthen the program.

D. To what extent will additional staff and facilities for the proposed program help make related departments or fields of concentration stronger?

VII. Justification for the Initiation of the Proposed Program

A. Is there a national need for *more* people trained in a graduate program such as is herein proposed? Please describe job opportunities nationally. Refer to any national studies as needed.

B. Is there a special need in the State of Florida for graduate programs such as the one herein described? Please describe job opportunities locally.

C. If there is a national and local need for more people to be trained in this field, and at the level in the proposed program, are there special reasons why it should be offered at your institution rather than at one of the other institutions in the State University System?

D. Is there interest on the part of local industry, agencies, or research centers in the proposed program? Please document.

- E. Please state other justifications for the initiation of this program which may not have been included above.

VIII. Similar Programs Presently Offered in Non-Florida Universities of the Southern Region

- A. Are degree programs in this discipline offered at non-Florida institutions in the Southern Region?
- B. If so, in which specialties, at which institutions, and at what levels?
- C. How similar or dissimilar are these to the program herein proposed?

IX. Similar Programs Presently Offered in Florida

- A. Are degree programs offered in this discipline at other state universities in Florida? If so, in which specialties, at which institutions, and at what levels? How similar or dissimilar are these to the program herein proposed?
- B. Are degree programs in this discipline offered in any private colleges or universities in Florida? If so, at which institutions, in which specialties, and at what levels? How similar or dissimilar are they to the program herein proposed?

X. Student Interest in the Proposed Program

- A. How many students (headcount and FTE) are anticipated in the proposed program during each of the five years after its inception?
- B. Please provide any indication you might have about student interest in the proposed program from inside and outside of the institution. What is the basis for this opinion?
- C. What do you think will be the source and quality of most of the students that you expect to enroll in this program?
- D. If the proposed program were not established do you think the anticipated students would enroll in other universities in the System? In other institutions in Florida? If not, please explain.

XI. Financial Aid to Students

- A. What is the total amount of money that will be available to the department for graduate fellowships, scholarships, and student loans for each of the next five years if the program is approved? How many students would be granted fellowships, scholarships, or loans for this amount each year and what are the anticipated sources of these funds? State? Federal? Private?

B. What is the total amount of money that will be available to the department for graduate assistantships for each of the next five years if the program is approved? How many students would be awarded graduate assistantships for this amount? How many would be teaching assistantships and how many would be research assistantships? What is the anticipated source of these funds? State? Federal? Private?

XII. Faculty

A. List the names of permanent faculty in the department. Beside each name give highest degree, rank, and specialty, and indicate what per cent of an FTE position each is presently filling in actual on-campus undergraduate teaching. On-campus graduate teaching?

B. How many of the faculty have directed one or more doctoral students to the final completion of the doctoral dissertation? How many have directed two or more?

C. How many have directed one or more master's students to the final completion of a master's thesis? (Do not count master's students who have not included theses in their programs.) How many have directed two or more?

D. What is (a) the total number of doctoral dissertations, and (b) total number of master's theses that have been directed to completion by all of the faculty in the department collectively?

E. How many FTE faculty positions were used each of the last three terms (excluding summer term) to teach all the on-campus undergraduate courses and classes offered by the department? All of the on-campus graduate courses offered by the department?

F. How many additional FTE teaching positions will be allocated to the department each of the next five years? How many of these will be used for the proposed program?

G. How many and what additional non-academic support positions will be allocated for each of the next five years specifically for this proposed program?

H. In Section XXI of this questionnaire please provide information as instructed about each permanent member of the faculty in the department who will be *directly* involved in the proposed program.

I. How many graduate teaching assistants are presently involved in teaching undergraduate courses in the department, and how many undergraduate courses in the department are presently being taught wholly or partly by graduate teaching assistants?

J. How many additional graduate teaching assistants will be involved in teaching undergraduate courses as a result of approval of this program?

XIII. Facilities (To be completed and signed by the officer responsible for allocation of space or the chairman of the university space committee.)

A. Indicate space and facilities currently available to the department for the operation of its present program in the subject discipline as designated in the space inventory — classroom, laboratory, offices, etc. Are the space and facilities adequate for operation of the present program?

B. Indicate the additional space and facility needs for the proposed program by type space as designated in the space inventory.

C. Indicate space and facilities in current inventory which will be committed to this program — by kind of space.

D. If additional space is required, what space under construction or funded for construction will be made available for the proposed program?

E. What equipment is presently available and what equipment must be obtained? When will it be obtained? How much will it cost? How will it be funded?

XIV. Library Resources (To be completed and signed by the officer responsible for allocation of library budget or chairman of committee having this responsibility.)

A. As best you can, give some quantitative estimate of present library holdings such as:
   1. Total number of books in the university library.
   2. Number of books in the discipline of the proposed program.
   3. Total number of journals (titles) in the university library currently subscribed to.
   4. Number of journals in the discipline of the proposed program currently subscribed to.
   5. Number of micro materials in the discipline presently available in the library.

B. Are the library resources, including personnel and space, adequate for the operation of the present program?

C. Indicate additional library needs for the proposed program, including personnel, space, books, journals, and materials. When will these resources be obtained? At what cost? How will they be funded?

D. Indicate dollar amount expended for the department during each of the last three years for (a) library books, (b) journals, and (c) materials. Indicate the amount that the institution will allocate the first year of the program for each of the three categories, and the projected expenditure for each of the following four years.

XV. Other Needs

Are there other needs which have not yet been described? If so, please list them; estimate their initial cost and the annual cost thereafter.

XVI. Accreditation

A. Name the accrediting agencies and learned societies which would be concerned with the particular program herein proposed.

B. What professional criteria are currently available in the discipline and how has your program been developed in accordance with these criteria? Please attach copies of criteria.

XVII. Summary of Estimated Costs of Program, Funds from State Appropriations that the President of the University will Commit to the Program if it is Approved, and Funds Cur-

rently Available from Sponsored Teaching and/or Research Projects

A. Summarize the estimated costs of the program herein proposed by completing the table on page A-14. Include only costs which would be additional as a result of initiating and operating the proposed program.

B. Please list possible sources of financial support for this program other than the state. Where possible, indicate which expenditure items are eligible for this outside support and the percentage of the cost that might be obtained from this source.

C. Please summarize by completing the table on page A-15, the actual amounts which the institution will allocate to the department proposing the program from state appropriations only.

D. Sponsored Projects
    1. How many sponsored teaching and/or research projects are currently being conducted by the department proposing the new degree program?
    2. For each sponsored project provide the following information:
        (a) Principal investigator
        (b) Title of project
        (c) Name of sponsoring agency
        (d) Effective beginning and ending date of project
        (e) Total dollar amount of the project for its entire duration
        (f) Total amount available from the project on an annual basis
        (g) How much of the above annual amount will be available for:
            (1) graduate student stipends
            (2) tuition
            (3) operating expenses

XVIII. Evaluation of Proposed Program

A. Please name faculty committees or councils of your university which have reviewed and approved the program herein proposed. Please attach copies of any reports prepared by faculty committees or councils.

B. If outside consultants have been employed, list the names of the consultants and their current positions and titles. Please append hereto copies of their reports.

XIX. Summary of Estimated Costs

EXPENDITURE ITEMS	COST				
	Estimated Total Additional Cost Per Year Resulting From the Initiation and Operation of the Proposed Program*				
	Year				
	1st	2nd	3rd	4th	5th
	Cost	Cost	Cost	Cost	Cost
Faculty (teachers and researchers)					
Technical and Clerical Personnel					
Construction of New Space or Major Renovation					
Equipment					
Library Resources (personnel, acquisitions, and equipment)					
Fellowships and Scholarships					
Graduate Assistantships					
Materials and Supplies					
Other Items (Please list)					
TOTAL					
Percentage of Total Anticipated From State Appropriations					

*The estimate for each year should be the amount needed over and above the amount that would be needed by the department for normal expansion if the proposed program were not approved.

XX. Summary of Actual Allocations

	A Total Financial Commitment* to the Department if the Proposed Program is not approved		B Total Financial Commitment* to the Department if the Proposed Program is approved		C C = B-A** Difference In the Financial Commitments (Subtract A from B)	
	1st Year	2nd Year	1st Year	2nd Year	1st Year	2nd Year
Faculty (teachers and researchers)						
Technical and Clerical Personnel						
Construction of New Space or Major Renovation						
Equipment						
Library Resources (personnel, acquisitions, and equipment)						
Fellowships and Scholarships						
Graduate Assistantships						
Materials and Supplies						
Other Items (Please list)						
TOTAL						

*Financial commitment refers to the institution's commitment from State appropriations only.
**Totals for first and second years under Column C should be placed in appropriate space on Page 19.

XXI. Faculty (Continued)

Please list permanent faculty currently on your staff who will be *directly* involved in the teaching and supervision of students who will enroll in the proposed program, and for each faculty member listed provide the following information:

1. Name of faculty person and rank.
2. Date of birth.
3. Highest degree, year obtained, and the university from which obtained.
4. Chronological professional history, including names of employing agencies or educational institutions, titles, ranks, and dates.
5. Number of doctoral students directed to the completion of the doctoral dissertation — at which institution?
6. Number of master's students directed to the completion of the master's thesis — at which institution?
7. List not more than four specialties or subspecialties in which this faculty person is competent to direct doctoral research.
8. List not more than four specialties or subspecialties in which this faculty person is competent to direct master's thesis research.
9. Attach a list of the faculty member's publications which should give the names of all co-authors (if any), title of paper or book, journal, volume, number, pages (inclusive), and year.
10. List the names of the five most important professional journals publishing papers in the area of the faculty member's specialty. In the above list of publications of the faculty member, check the papers which have appeared in these journals.
11. List titles of research in progress or recently completed. For each project sponsored financially, give the name of sponsoring agency, the total dollar amount and the number of years covered by the grant.
12. Provide other information about this faculty person which may have pertinence to the proposed graduate program.

APPENDIX II

APPENDIX II

STATE UNIVERSITY SYSTEM OPERATING NEED ESTIMATE – 1980

	UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF	TOTAL
Student Crd. Hrs. – Lwr.	139,635	127,950	56,355	67,500	–0–	–0–	99,000	–0–	–0–	490,440
Student Crd. Hrs. – Upr.	228,420	219,915	28,875	288,000	100,350	146,250	229,860	232,725	87,405	1,561,800
Student Crd. Hrs. – MA	61,752	62,928	3,816	66,600	14,160	36,000	38,844	22,344	14,124	320,568
Student Crd. Hrs. – Ph.D.	37,116	36,792	–0–	4,080	1,884	3,000	1,512	1,092	684	86,160
Total Graduate SCH	**98,868**	**99,720**	**3,816**	**70,680**	**16,044**	**39,000**	**40,356**	**23,436**	**14,808**	**406,728**
Student Credit Hrs. – N Res.	13,108	12,571	3,083	15,084	10,775	5,744	3,950	–0–	–0–	64,315
FTE Students, Lower	9,309.0	8,530.0	3,757.0	4,500.0	.0	.0	6,600.0	.0	.0	32,696.0
FTE Students, Upper	15,228.0	14,661.0	1,925.0	19,200.0	6,690.0	9,750.0	15,324.0	15,515.0	5,827.0	104,120.0
FTE Students, M. A.	5,146.0	5,244.0	318.0	5,550.0	1,180.0	3,000.0	3,237.0	1,862.0	1,177.0	26,714.0
FTE Students, Ph.D.	3,093.0	3,066.0	.0	340.0	157.0	250.0	126.0	91.0	57.0	7,180.0
Total FTE Students	**32,776.0**	**31,501.0**	**6,000.0**	**29,590.0**	**8,027.0**	**13,000.0**	**25,287.0**	**17,468.0**	**7,061.0**	**170,710.0**
SCH Per Prof. – Lower	400.0	400.0	350.0	400.0	400.0	400.0	400.0	400.0	400.0	
SCH Per Prof. – Upper	255.0	255.0	240.0	275.0	275.0	260.0	250.0	250.0	250.0	
SCH Per Prof. – M. A.	195.0	195.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	
SCH Per Prof. – Ph.D.	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	
SCH Per Prof. – Non-Res.	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
FTE Professors – Lower	349.1	319.9	161.0	168.8	.0	.0	247.5	.0	.0	1,246.3
FTE Professors – Upper	895.8	862.4	120.3	1,047.3	364.9	562.5	919.4	930.9	349.6	6,053.1
FTE Professors – Undergraduate	1,244.9	1,182.3	281.3	1,216.1	364.9	562.5	1,166.9	930.9	349.6	7,299.4
FTE Professors – M. A.	316.7	322.7	17.3	302.7	64.4	163.6	176.6	101.6	64.2	1,529.8
FTE Professors – Ph.D.	441.9	438.0	.0	48.6	22.4	35.7	18.0	13.0	8.1	1,025.7
FTE Professors – Non-Resident	43.7	41.9	10.3	50.3	35.9	19.1	13.2	.0	.0	214.4
Total FTE Professors	**2,047.2**	**1,984.9**	**308.9**	**1,617.7**	**487.6**	**780.9**	**1,374.7**	**1.045.5**	**421.9**	**10,069.3**

APPENDIX II (Continued)

	UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF	TOTAL
Profs. per Res. Pos. – UG	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Profs. per Res. Pos. – MA	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Profs. per Res. Pos. – Ph.D.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
FTE Research Pos. – Undergrad.	103.8	98.6	23.4	101.4	30.4	46.9	97.2	77.6	29.1	608.4
FTE Research Pos. – M. A.	79.2	80.7	4.3	75.7	16.1	40.9	44.2	25.4	16.1	382.6
FTE Research Pos. – Ph.D.	221.0	219.0	.0	24.3	11.2	17.9	9.0	6.5	4.1	513.0
Total FTE Research Positions	**404.0**	**398.3**	**27.7**	**201.4**	**57.7**	**105.7**	**150.4**	**109.5**	**49.3**	**1,504.0**
Students per Counseling Pos.	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	
FTE Counselfing Positions	131.1	126.0	24.0	118.4	32.1	52.0	101.1	69.9	28.2	682.8
FTE Prof. per FTE Pro. Ser. Pos.	50.0	50.0	10.5	50.0	50.0	50.0	50.0	50.0	50.0	
FTE Professional Service Pos.	40.9	39.7	29.4	32.4	9.8	15.6	27.5	20.9	8.4	224.6
Total Instructional Positions	**2,623.2**	**2,548.9**	**390.0**	**1,969.9**	**587.2**	**954.2**	**1,653.7**	**1,245.8**	**507.8**	**12,480.7**
Instru. Pos. per Admin. Pos.	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	
FTE Administrative Positions	201.8	196.1	30.0	151.5	45.2	73.4	127.2	95.8	39.1	960.1
Total Academic Positions	**2,825.0**	**2,745.0**	**420.0**	**2,121.4**	**632.4**	**1,027.6**	**1,780.9**	**1,341.6**	**546.9**	**13,440.8**
Graduate Assistants – 9 Mo.	272.5	245.6	.0	25.3	16.9	.0	.0	.0	.0	
Reg. FTE Faculty Positions	2,552.5	2,499.4	420.0	2,096.1	615.5	1.027.6	1,780.9	1,341.6	546.9	12,880.5
Summer to Fall Positions	60.0	60.0	90.0	.0	70.0	70.0	100.0	100.0	100.0	
Summer Faculty Positions	1,605.0	1,608.7	366.5	.0	419.0	668.0	1,570.3	1,205.7	466.0	7,909.2
Graduate Assistants 3 Mos.	51.0	90.0	36.5	.0	.0	.0	.0	.0	.0	177.5
Reg. FTE Summer Faculty Pos.	1,554.0	1,518.7	330.0	.0	419.0	668.0	1,570.3	1,205.7	466.0	7,731.7

APPENDIX II (Continued)

	UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF	TOTAL
Number of Deans	10.5	12.0	7.0	6.0	8.0	5.0	8.0	8.0	8.0	72.5
Number of 12 month Positions	129.4	51.6	38.0	552.8	74.0	33.0	28.0	28.0	28.0	962.8
Number of 9 nomth Postitions	2,412.6	2,435.8	375.0	1,537.3	533.5	989.6	1,744.9	1,305.6	510.9	11,845.2
Number of 3 month Positions	1,414.1	1,455.1	285.0	–0–	337.0	630.0	1,534.3	1,169.7	430.0	7,255.2
Salary Average – Deans	$ 25,184	25,184	25,184	25,184	25,184	25,184	25,184	25,184	25,184	
Salary Average – 12 Mo. Pos.	$ 16,436	16,436	16,436	16,436	16,436	16,436	16,436	16,436	16,436	
Salary Average – 9 Mo. Pos.	$ 13,472	13,472	13,472	13,472	13,472	13,472	13,472	13,472	13,472	
Salary Average – 3 Mo. Pos.	$ 3,559	3,559	3,559	3,559	3,559	3,559	3,559	3,559	3,559	
Salary Amount – Deans	$ 264,432	302,208	176,288	151,104	201,472	125,920	201,472	201,472	201,472	1,825,840
Salary Amount – 12 Mo. Pos.	$ 2,126,818	848,098	624,568	9,085,821	1,216,264	542,388	460,208	460,208	460.208	15,824,581
Salary Amount – 9 Mo. Pos.	$32,502,547	32,815,098	5,052,000	20,710,506	7,187,312	13,331,891	23,507,293	17,589,043	6,882,845	159,578,535
Salary Amount – 3 Mo. Pos.	$ 5,032,782	5,178,701	1,014,315	–0–	1,199,383	2,242,170	5,460,574	4,162,962	1,530,370	25,821,257
Total Salary Amount	$39,926,579	39,144,105	6,867,171	29,947,431	9,804,431	16,242,369	29,629,547	22,413,685	9,074,895	203,050,213
Acad. Pos. per Non-Acad. Pos.	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	
Total Non-Academic Positions	882.8	857.8	131.3	662.9	197.6	321.1	556.5	419.3	170.9	4,200.2
Student Assistants & Labor	95.4	82.8	25.0	19.2	13.1	10.3	6.4	6.4	6.4	265.0
Reg. FTE Non-Academic Pos.	787.4	775.0	106.3	643.7	184.5	310.8	550.1	412.9	164.9	3,935.2
Salary Avg., FTE Non-Acad.	$ 5,487	5,837	5,313	5,716	5,608	4,978	5,380	5,380	5,380	
Total Salary Amt., Non-Acad.	$ 4,320,464	4,523,675	564,772	3,679,389	1,034,676	1,547,162	2,959,538	2,221,402	885,010	21,736,088
Salary Avg., Student Asst.	$ 3,328	3,328	3,328	3,328	3,328	3,328	3,328	3,328	3,328	
Total Salary Amt., Stud. Asst.	$ 317,491	275,558	83,200	63,898	43,597	34,278	21,299	21,299	21,299	881,919
Salary per Mo., Grad. Asst.	$ 685	685	685	685	685	685	685	685	685	
Total Salary Amt., Grad. Asst.	$ 1,784,772	1,699,074	75,009	155,979	104,193	–0–	–0–	–0–	–0–	3,819,027

APPENDIX II (Continued)

		UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF	TOTAL
Consultant $$$ per Faculty Pos.	$	17.69	19.17	17.36	15.28	20.20	25.64	33.33	33.33	33.33	
Total Salary Amount, Consultant	$	45,154	47,914	7,291	32,028	12,433	26,348	59,357	44,716	18,228	293,469
Fellowship $$$ per Graduate SCH	$	3.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Total Salary Amount, Fellowship	$	296,604	299,160	3,816	70,680	16,044	39,000	40,356	23,436	14,808	803,904
% Faculty Elig. for Grants		35.2	33.4	46.4	22.5	.0	56.2	29.3	29.3	29.3	
Number of Faculty Eligible		898.4	834.8	194.8	471.6	.0	577.5	521.8	393.0	160.2	4,052.1
% Faculty Receiving Grants		5.2	4.9	5.0	5.0	.0	5.0	4.5	4.5	4.5	
Number of Grants Recipients		46.7	40.9	9.7	23.5	.0	28.8	23.4	17.6	7.2	197.8
Average Value of Grant	$	7,076	7,073	6,035	6,769	–0–	5,771	8,080	5,771	8,080	
Salary Amount, Faculty Dev.		330,449	289,286	58,540	159,072	–0–	166,205	189,072	101,570	58,176	1,352,370
Expense Amount per Acad. Pos.	$	1,310	1,310	1,075	1,075	1,075	1,075	1,075	1,075	1,075	
Total I & R Expense Amount	$	3,700,750	3,595,950	451,500	2,280,505	679,830	1,104,670	1,914,468	1,442,220	587,918	15,757,811
Non-Resident Expense Rate		3.27	4.30	1.43	2.31	2.00	2.25	1.79	1.79	1.79	
Total Non-Resident Expense	$	42,863	54,055	4,409	34,844	21,550	12,924	7,071	–0–	–0–	177,716
Total Amount for I & R*		$ 50,765,126	49,928,777	8,115,708	36,423,826	11,716,754	19,172,956	34,820,708	26,268,328	10,660,334	247,872,517
Total Amount for 9 Budgets		$105,760,679	104,018,285	16,907,725	75,882,971	24,409,904	39,943,658	72,543,142	54,725,683	22,209,029	516,401,076

*I & R is 48 per cent of the Total Budget; we have extended this relationship to obtain our projections.

APPENDIX II (Continued)

	Calculated Dollar Estimates	Cost of Living Differential*	Adjusted Projections
Total Amount for 9 E & G Budgets	$516,401,076	1.63	$ 841,733,755
UF – IFAS	30,222,647	1.63	49,262,915
UF – Health Center	43,673,956	1.63	71,188,548
UF – EIES	6,031,000	1.63	9,830,530
UF – GENESYS	1,273,053	1.63	2,075,076
UF – Veterinary Medical School	2,128,350	1.63	3,469,211
USF – Medical School	5,494,600	1.63	8,956,198
Chancellor's Office	11,234,687	1.63	18,312,540
TOTAL STATE UNIVERSITY SYSTEM	$616,459,369		$1,004,828,773

*Assumes 4 per cent annual cost of living increase compounded to 1980.

APPENDIX III

APPENDIX III

STATE UNIVERSITY SYSTEM ESTIMATED SPACE PROJECTIONS (1980)

IN DOLLARS

	UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF	TOTAL
General Purpose Classrooms	4,574,505	3,613,675	–0–	5,561,628	398,770	5,449,210	8,339,078	9,302,670	3,718,748	40,953,284
Teaching Laboratories	–0–	–0–	–0–	8,212,619	–0–	3,883,847	7,509,478	13,190,889	5,332,100	38,128,933
Library & Study Facilities	4,539,034	4,668,846	2,052,070	7,273,858	2,904,076	3,605,190	5,693,776	6,804,216	4,089,588	41,630,654
Learning Resource Space	724,744	568,480	340,510	64,328	–0–	273,156	1,073,992	928,472	373,150	4,346,832
Research Laboratories	44,629,499	30,104,849	6,478,542	13,851,198	3,958,449	9,446,757	24,097,673	11,700,920	3,229,933	147,497,820
Offices, Inc. Conference Rooms	9,717,710	16,482,486	2,362,320	17,863,940	2,598,484	11,462,590	21,793,116	18,186,906	8,002,580	108,470,132
Physical Plant Service Area	–0–	3,005,034	–0–	1,169,278	–0–	983,733	1,845,947	1,748,574	736,526	9,489,092
Student Services Space	1,534,522	2,481,898	–0–	4,135,794	51,952	2,182,630	3,966,712	2,975,510	1,202,784	18,531,802
Total Academic Space	65,720,014	60,925,268	11,233,442	58,132,643	9,906,731	37,287,113	74,319,772	64,838,157	26,685,409	409,048,549
UF – IFAS										5,406,301
UF – Health Center										33,241,230
UF – Veterinary Medical School										12,500,000
USF – Medical School										12,500,000
Grand Total Academic Space										472,696,080

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